```
Set      Items    Description
S1      3138040   VEHICLE? ? OR AIRCRAFT? ? OR AIRPLANE? ? OR AIRLINER? ? OR
                  PLANE OR PLANES OR JET? ? OR HELICOPTER? ? OR SPACE()SHUTTLE -
                  OR CAR OR CARS OR AUTO OR AUTOMOBILE? ? OR TRUCK? ? OR BUS OR
                  BUSES OR TRAIN? ? OR SHIP? ? OR BOAT? ? OR SUBMARINE? ?
S2       980003   LOADER OR READER OR RECEIVER OR PLAYER OR TRAY OR (LOADING
                  OR READING OR RECEIVING OR PLAYING)()(UNIT OR DEVICE OR COMPO-
                  NENT OR HARDWARE OR MECHANISM OR MODULE OR ELEMENT)
S3      1057189   MEDIA()(ELEMENT? ? OR UNIT? ?) OR CARTRIDGE? ? OR CASSETTE?
                  ? OR DISC? ? OR DISK? ? OR DISKETTE? ? OR CD OR CDS OR CDROM
                  OR DVD OR DVDR OR DVDRW OR DVDROM OR DVDRAM OR MINIDISK? ? OR
                  MINIDISC? ? OR CDR OR CDRW OR FLOPPY OR FLOPPIES
S4       313117   (OPTIC? OR PORTABLE OR TRANSPORTABLE OR REMOVABLE)(1W)(MED-
                  IA OR MEDIUM OR STORAGE) OR (PORTABLE OR TRANSPORTABLE OR REM-
                  OVABLE OR FLASH OR USB OR THUMB)(1W)DRIVE? ? OR THUMBDRIVE? ?
                  OR MICROVAULT OR CARD? ?
S5         9381   (UNIT OR DEVICE OR PROCESSOR OR COMPONENT OR LOGIC OR MODU-
                  LE OR FUNCTIONAL()BLOCK OR ELEMENT OR CHIP OR MICROCHIP OR CI-
                  RCUIT OR IC)(15N)(DECRYPT??? OR DECIPHER???? OR UNENCRYPT??? -
                  OR DESCRAMBL??? OR UNSCRAMBL?)
S6      1174441   (SEND??? OR SENT OR TRANSFER???? OR TRANSMIT???? OR TRANSM-
                  ISSION? ? OR DELIVER??? OR PROVID??? OR FORWARD??? OR COMMUNI-
                  CAT? OR RECEIV??? OR RECEPTION)(5N)(SIGNAL? ? OR STREAM? ? OR
                  BITSTREAM? ? OR DATASTREAM? ? OR BYTESTREAM? ?)
S7      1667860   (SEND??? OR SENT OR TRANSFER???? OR TRANSMIT???? OR TRANSM-
                  ISSION? ? OR DELIVER??? OR PROVID??? OR FORWARD??? OR COMMUNI-
                  CAT? OR RECEIV??? OR RECEPTION)(5N)(PACKET? ? OR FRAME? ? OR -
                  DATA OR INFORMATION OR CONTENT? ? OR FILE? ? OR MEDIA OR AUDO)
S8       376190   (SEND??? OR SENT OR TRANSFER???? OR TRANSMIT???? OR TRANSM-
                  ISSION? ? OR DELIVER??? OR PROVID??? OR FORWARD??? OR COMMUNI-
                  CAT? OR RECEIV??? OR RECEPTION)(5N)(VIDEO? ? OR MOVIE? ? OR P-
                  ROGRAM? ? OR APPLICATION? ? OR SOFTWARE OR MUSIC OR SONG? ?)
S9       117364   S2(50N)S3:S4
S10          70   S1 AND S9 AND S5 AND S6:S8
S11           1   (MOBILE()PLATFORM? ?) AND S9 AND S5 AND S6:S8
S12        3678   S5(50W)S6:S8
S13          47   S1 AND S9 AND S12
S14          47   S11 OR S13
S15          19   S14 AND PY=1963:2002
S16          24   S14 AND AY=1963:2002 AND AC=US
S17          28   S15:S16
S18       99703   S1(50N)S3:S4
S19          86   S18 AND S12
S20          54   S19 NOT S10
S21          27   S20 AND PY=1963:2002
S22          30   S20 AND AY=1963:2002 AND AC=US
S23          36   S21:S22
```

17/5,K/1   (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0015830949 - Drawing available
WPI ACC NO: 2006-053643/200606
XRPX Acc No: N2006-046203
**Digital versatile disk program streams passing method to video decoder,
involves** decrypting **DVD data into packet data, and forwarding through
first-in first-out** element **to decoder**
Patent Assignee: ATI INT SRL (ATII-N)
Inventor: EIREF D; HESCH L
Patent Family (1 patents, 1 countries)
Patent   Application
Number   Kind Date   Number   Kind   Date   Update
US 6975809   B1 20051213 US 2000712360   A   20001114 200606 B

Priority Applications (no., kind, date): US 2000712360 A 20001114

Patent Details
Number   Kind Lan   Pg Dwg Filing Notes
US 6975809   B1 EN   6   2

  Alerting Abstract US B1
  NOVELTY - The digital versatile disk (**DVD**) data is read by a central
processing **unit** from a DVD drive across a peripheral **component**
interconnect (PCI) **bus** . The **DVD** data is **decrypted** and converted to
packet data by the CPU. The **packet** data is sent to a first-in first-out
(FIFO) element through a north bridge. The **receiver** **packet** **data** is
forwarded to the motion picture expert group (MPEG)-2 decoder.
  DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

  1.system for passing clear DVD program streams; and

  2.set-top box.

  USE - For passing clear DVD program streams from central processing unit
to a MPEG-2 decoder in a computer, set-top box etc., for displaying movies
from DVD.
  ADVANTAGE - Reduces the number of computations. Previously encrypted
transport or program streams are not sent across peripheral component
interconnect (PCI) **bus** and improves efficiency.
  DESCRIPTION OF DRAWINGS - The figure shows a block diagram explaining the
arrangement for passing clear digital versatile disk (DVD) program stream
to decoder.

Title Terms/Index Terms/Additional Words: DIGITAL; VERSATILE; DISC; PROGRAM
  ; STREAM; PASS; METHOD; VIDEO; DECODE; DATA; PACKET; FORWARDING; THROUGH;
  FIRST; ELEMENT

Class Codes
International Classification (Main): H04N-005/781
US Classification, Issued: 386125000, 386111000, 386046000

File Segment: EPI;
DWPI Class: T01; W02; W03; W04
Manual Codes (EPI/S-X): T01-D01; T01-H01B6; T01-H05B4; T01-J08A; T01-J10D;
  T01-N01D1; W02-F05A1; W02-F07M5; W02-K03; W03-A11D; W03-A16C3; W04-C10A3;
  W04-P01A4

**Digital versatile disk program streams passing method to video decoder,
involves** decrypting **DVD data into packet data, and forwarding through
first-in first-out** element **to decoder**

  Alerting Abstract ...NOVELTY - The digital versatile disk (**DVD**) data is
read by a central processing **unit** from a DVD drive across a peripheral
component interconnect (PCI) **bus** . The **DVD** data is **decrypted** and
converted to packet data by the CPU. The **packet** data is sent to a
first-in first-out (FIFO) element through a north bridge. The **receiver**
packet **data** is **forwarded** to the motion picture expert group (MPEG)-2
decoder....computations. Previously encrypted transport or program streams
are not sent across peripheral component interconnect (PCI) **bus** and

improves efficiency.

Original Publication Data by Authority

Original Abstracts:
...to an MPEG-2 decoder. In the system the CPU is connected to a first **bus** interface. A system **memory** is connected to the first **bus** interface via a **memory** **bus**. A second **bus** **interface** is connected **to** the first **bus** interface via a **PCI** (peripheral component interconnect) **bus** and a DVD **data** source is connected to the second **bus** interface. A packet **data** decoder is connected to the memory **bus** via a buffer. **The** CPU reads DVD data from the DVD data source across the PCI **bus**, decrypts the DVD **data** and creates a packet data, and sends the packet data to the buffer via the memory **bus**. The MPEG-2 **decoder** receives the packet data, via the transport **bus**, from the buffer. **In** more general terms, the system connects two existing busses in a computer of set-top...
Claims:
...a CPU (central processing unit) to a decoder, comprising:a CPU connected to a first **bus** interface;system memory **connected** to the first **bus** interface via a memory **bus**; **a** second **bus** interface connected **to** the first **bus** interface **via** a PCI (peripheral component interconnect) **bus** ;a DVD data source connected to the **second** **bus** interface; and a packet data decoder connected to the **memory** **bus** via a buffer;wherein the CPU reads DVD data from the **DVD** data source across the PCI **bus**, decrypts the DVD data and creating packet data, sends the packet data to **the** buffer via the memory **bus**, and wherein the decoder receives the packet data, via the transport **bus**, from **the** buffer. Basic Derwent Week: 200606

 17/5,K/3   (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0015211021   - Drawing available
WPI ACC NO: 2005-561046/200557
XRPX Acc No: N2005-459818
Method of selectively denying access to encoded data in military
helicopter field, involves deleting encryption key transferred from
magnetic card to computing device, by operator or automatically during
power loss
Patent Assignee: LOCKHEED MARTIN CORP (LOCK)
Inventor: KILMER R L; LEE L A; MENIGOZ D R
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 6928551	B1	20050809	US 1999162404	P	19991029	200557	B
			US 2000697304	A	20001027		

Priority Applications (no., kind, date): US 1999162404 P 19991029; US 2000697304 A 20001027

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes	
US 6928551	B1	EN	8	2	Related to Provisional	US 1999162404

  Alerting Abstract US B1
   NOVELTY - The encryption key loaded from mission planning workstation, is transmitted from magnetic card to non-volatile memory of portable computing device to execute desired process. The key is deleted from the card, after transporting the card and device to specific distance from the workstation. The encryption key is deleted from the memory by an operator or automatically in the event of power loss.
   DESCRIPTION - An INDEPENDENT CLAIM is also included for system for selectively denying access to encoded data.
   USE - For selectively denying access to encoded data in military **helicopter** field.
   ADVANTAGE - Protects the access of encoded data by the unauthorized person, reliably while quickly rendering the selected data unavailable from computer memory.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the
connection from mission planning workstation to the system with data access
denying unit.
   101 small computer system interface (SCSI) **bus**
   104 extended mass storage unit (EMSU) disk drive
   105 dual personal computer memory **card** international association
(PCMCIA) **card reader** data transfer system (DTS)

Title Terms/Index Terms/Additional Words: METHOD; SELECT; ACCESS; ENCODE;
   DATA; MILITARY; **HELICOPTER** ; FIELD; DELETE; ENCRYPTION; KEY; TRANSFER;
   MAGNETIC; CARD; COMPUTATION; DEVICE; OPERATE; AUTOMATIC; POWER; LOSS

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
   H04L-0029/06 A I   R 20060101
   H04L-0009/00 A I   R 20060101
   H04L-0029/06 C I   R 20060101
   H04L-0009/00 C I   R 20060101
US Classification, Issued: 713200000, 380050000, 380052000, 380273000,
   380278000, 380283000, 380286000, 713185000, 713193000, 713200000,
   713201000

File Segment: EPI;
DWPI Class: T01; T04; W06; W07
Manual Codes (EPI/S-X): T01-D01; T01-H01B4; T01-J07D1; T01-J12C; T04-A03A;
   W06-B01B; W07-X01

Method of selectively denying access to encoded data in military
helicopter **field, involves deleting encryption key transferred from**
magnetic card to computing device, by operator or...

   Alerting Abstract ...USE - For selectively denying access to encoded data
in military **helicopter** field...

...101 small computer system interface (SCSI) **bus**
   ...

...105 dual personal computer memory **card** international association
(PCMCIA) **card reader** data transfer system (DTS)

Title Terms.../Index Terms/Additional Words: **HELICOPTER** ;

Original Publication Data by Authority

Claims:
...sensitive data using said encryption key;loading the encrypted data onto
the media device;loading **unencrypted** data onto a media device, wherein
data necessary to enable a target portable **computing** device associated
with a **vehicle** to return to a location selected as a mission **end**
location remains **unencrypted** ;disconnecting said media **device** from the
mission planning **workstation** ;connecting a media **device** to the target
portable computing **device** ; **powering** up the target **portable** computing
device , thereby enabling it to execute a desired **program** or
process;transferring said encryption key to volatile memory from said media
device;transporting the target portable computing device **and** media
devices to a **location** physically distant from the mission planning
workstation;deleting said encryption key from said media device...
Basic Derwent Week: 200557

 17/5,K/4   (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0015126653 - Drawing available
WPI ACC NO: 2005-476185/200548
XRPX Acc No: N2005-387443
Terminal data loading device **installed in mobile** platform **e.g.**
aircraft, receives media data **from** media element **and outputs**
media signal to control processor for distribution to network as wireline

signal
Patent Assignee: FARLEY R J (FARL-I); RENTON J J (RENT-I)
Inventor: FARLEY R J; RENTON J J
Patent Family (1 patents, 1 countries)
Patent   Application
Number   Kind   Date   Number   Kind   Date   Update
US 20050129239 A1   20050616 US 2002428091   P   20021121 200548   B
                                 US 2003718474   A   20031120

Priority Applications (no., kind, date): US 2002428091 P 20021121; US
  2003718474 A 20031120

Patent Details
Number   Kind   Lan   Pg   Dwg   Filing Notes
US 20050129239 A1   EN   18   9   Related to Provisional US 2002428091

   Alerting Abstract US A1
   NOVELTY - The terminal data **loading device** (100) has **media unit**
like digital versatile **disk** (**DVD**) drive which reads the media data from
a **media element** e.g. **DVD** , and outputs the media signal (106) to a
control processor for generating an **information signal** (110). A
wireline **communication** unit outputs wireline **signal** (114) in response
to information signal to a network on the **aircraft** .
   DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

   1. method for securely processing and transferring information
      content   for   use with terminal data loading device;

   2. machine readable medium storing programs for information   content
      delivery over   network   on   mobile   platform;

   3. method for on - loading   content   for use with terminal data loading
      device on mobile   platform ; and

   4. method for off- loading   content   for use with terminal data loading
      device on mobile   platform .

   USE - For loading data content like in-flight entertainment (IFE) content
e.g. movies for **mobile platform** e.g. **aircraft** , tour **bus** , **train** ,
motor home, **cruise ship** , **vehicle** , using **mobile** communication **system**
 e .g. global system **for mobile communication** (GSM) **system** , voice,
data , facsimile and short message service (**SMS**) protocols.
   ADVANTAGE - **Provides** permanently installed, high data capacity
cryptographically secure terminal data loading (TDL) device for **receiving**
transport **media** element and **delivering information content** to users
in mobile **platforms** . **Enables** to **decrypt protected content** in real
time, **as it** is read **from** removable medium so that movies and other
content need to be transported to the **aircraft** unsecured.
   DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the
terminal data loading device.
   100 TDL device
   106 media signal
   110 information signal
   114 wireline signal

Title Terms/Index Terms/Additional Words: TERMINAL; DATA; LOAD; DEVICE;
INSTALLATION; MOBILE; PLATFORM; **AIRCRAFT** ; RECEIVE; MEDIUM; ELEMENT;
OUTPUT; SIGNAL; CONTROL; PROCESSOR; DISTRIBUTE; NETWORK; WIRELINE

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
   H04K-0001/00   A   I   R   20060101
   H04K-0001/00   C   I   R   20060101
US Classification, Issued: 380270000

File Segment: EPI;
DWPI Class: T01; W02; W06; X22; X23
Manual Codes (EPI/S-X): T01-N01D1; T01-N02B1B; T01-S03; W02-C03C; W02-F07M5
 ; W06-B01C7; W06-C01C9; X22-J13; X23-A13

DIALOG(R)File 350:Derwent WPIX
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0014320067 - Drawing available
WPI ACC NO: 2004-507539/200448
XRPX Acc No: N2004-401095
Data processing system in serial communication network, has peripheral
device with hardware encryption logic to encrypt input data, and interface
circuit to transmit encrypted data over dedicated encrypted virtual channel
Patent Assignee: KONINK PHILIPS ELECTRONICS NV (PHIG)
Inventor: EVOY D; EVOY D R; EVOY R D
Patent Family (9 patents, 107 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2004056031	A2	20040701	WO 2003IB6012	A	20031217	200448	B
AU 2003288591	A1	20040709	AU 2003288591	A	20031217	200474	E
EP 1576802	A2	20050921	EP 2003780432	A	20031217	200562	E
			WO 2003IB6012	A	20031217		
TW 200423669	A	20041101	TW 2003135835	A	20031217	200612	E
US 20060059213	A1	20060316	US 2002434796	P	20021218	200620	E
			WO 2003IB6012	A	20031217		
			US 2005539196	A	20050617		
JP 2006511123	W	20060330	WO 2003IB6012	A	20031217	200623	E
			JP 2004560124	A	20031217		
AU 2003288591	A8	20051110	AU 2003288591	A	20031217	200634	E
CN 1729644	A	20060201	CN 200380107082	A	20031217	200643	E
KR 2005092710	A	20050922	WO 2003IB6012	A	20031217	200648	E
			KR 2005711071	A	20050616		

Priority Applications (no., kind, date): US 2002434796 P 20021218; US
   2005539196 A 20050617

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2004056031	A2	EN	36	10	

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY
   BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU
   ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX
   MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ
   UA UG US UZ VC VN YU ZA ZM ZW
Regional Designated States,Original: AT BE BG BW CH CY CZ DE DK EA EE ES
   FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL
   SZ TR TZ UG ZM ZW

AU 2003288591	A1	EN			Based on OPI patent WO 2004056031
EP 1576802	A2	EN			PCT Application WO 2003IB6012
					Based on OPI patent WO 2004056031

Regional Designated States,Original: AL AT BE BG CH CY CZ DE DK EE ES FI
   FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

TW 200423669	A	ZH			
US 20060059213	A1	EN			Related to Provisional US 2002434796
					PCT Application WO 2003IB6012
JP 2006511123	W	JA	27		PCT Application WO 2003IB6012
					Based on OPI patent WO 2004056031
AU 2003288591	A8	EN			Based on OPI patent WO 2004056031
KR 2005092710	A	KO			PCT Application WO 2003IB6012
					Based on OPI patent WO 2004056031

Alerting Abstract WO A2
   NOVELTY - The peripheral device (16) e.g. **DVD player** connected to
host device (12) through peripheral component interconnect (PCI) (14), has
hardware encryption logic (34) to encrypt input data **stream**, and
interface **circuit** (32) to transmit encrypted data stream over dedicated
encrypted virtual channel. The host **device** has interface **circuit** (30)
to receive encrypted data stream and **decryption logic** (36) to **decrypt**
it.
   DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

   1.circuit arrangement;

   2.program product for circuit arrangement definition;

3.data communication method;

4.data access provision method;

5.integrated circuit; and

6.access card.

USE - For processing data such as movie, music and television broadcast to be transmitted between host device and peripheral device such as **DVD player** , game system, set-top box and digital satellite broadcast **receiver** in multi- **channel** **serial** communication network.
ADVANTAGE - The payload modifications necessary to implement dedicated encrypted virtual channel are implemented external to the circuits, thereby implementing encrypted virtual channels without any modification to the PCI-express standard. Additional channels are provided for non-encrypted data transmission and a common **bus** resource is shared for multiple usages, thereby reducing cost, allowing for increased flexibility **in** portion of data to be encrypted.
DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the data processing system
    12 host device
    14 PCI
    16 peripheral device
    30,32 interface circuits
    34 hardware encryption logic
    36 decryption logic

Title Terms/Index Terms/Additional Words: DATA; PROCESS; SYSTEM; SERIAL; COMMUNICATE; NETWORK; PERIPHERAL; DEVICE; HARDWARE; ENCRYPTION; LOGIC; INPUT; INTERFACE; CIRCUIT; TRANSMIT; DEDICATE; VIRTUAL; CHANNEL

Class Codes
International Classification (Main): H04L-009/00, H04L-009/06, H04N-005/00
(Additional/Secondary): H04N-007/24
International Classification (+ Attributes)
IPC + Level Value Position Status Version
    G06F-0021/00 A I   R 20060101
    G06F-0003/00 A I   F B 20060101
    H04L-0009/00 A I   F B 20060101
    H04L-0009/10 A I   F B 20060101
    G06F-0021/00 C I   R 20060101
    G06F-0003/00 C I   L B 20060101
    H04L-0009/00 C I   L B 20060101
US Classification, Issued: 708135000

File Segment: EPI;
DWPI Class: T01; W01
Manual Codes (EPI/S-X): T01-C07C4; T01-D01; T01-S03; W01-A05A

Alerting Abstract ...NOVELTY - The peripheral device (16) e.g. **DVD player** connected to host device (12) through peripheral component interconnect (PCI) (14), has hardware encryption logic (34) to encrypt input data **stream** , and interface **circuit** (32) to transmit encrypted data stream over dedicated encrypted virtual channel. The host **device** has interface **circuit** (30) to receive encrypted data stream, and **decryption logic** (36) to **decrypt** it. ...music and television broadcast to be transmitted between host device and peripheral device such as **DVD player** , game system, set-top box and digital satellite broadcast **receiver** in multi- **channel** **serial** communication network.
    ...

...PCI-express standard. Additional channels are provided for non-encrypted data transmission and a common **bus** resource is shared for multiple usages, thereby reducing cost, allowing for increased flexibility **in** portion of data to be encrypted

Original Publication Data by Authority

Original Abstracts:
...along chip boundaries. In one particular application, access control may be provided for a digital **data** stream using a multi- **chip** access control

scheme that relies on one chip (148) to provide access control over a...

...multiple chips re-encrypts a digital data stream that has been decrypted on the access **control** chip (**148**) using hardware **encryption** logic (**162**) disposed on **the** access control chip (**148**), communicates the re-encrypted digital data steam over a dedicated encryption virtual channel supported by the multi-channel serial communications interface, and decrypts the re-encrypted **digital** data steam using hardware decryption **logic** (**164**) disposed **on the** other chip (**150**).

...

...from among multiple virtual channels supported by the communications interface (14). Encryption for the dedicated **encrypted** virtual channel is provided by a hardware encryption circuit (34) that is coupled to the...

...re-encrypts a digital data stream that has been decrypted on the access control chip (148) using hardware encryption logic (162) disposed on the access control chip (148), **communicates** the re-encrypted digital **data** steam over a dedicated encryption virtual **channel** supported by the multi-channel serial communications interface, and decrypts **the** re-encrypted digital data steam using hardware decryption **logic** (164) disposed on the other chip (150).

...

...A data processing system, circuit arrangement, and method to communicate **data** over a multi-channel serial communications **interface** (14) using a dedicated encrypted virtual channel from among **multiple** virtual channels supported by the communications interface (14). Encryption for the dedicated encrypted virtual channel...

...stream with another chip (150) utilized to process the digital data stream once authorized to **do** so. A secure, multi-channel serial communications **interface** between the multiple chips re-encrypts a digital data stream that has been **decrypted on** the access control chip (**148**) using hardware encryption logic (**162**) disposed on the access control chip (148), communicates the re-encrypted digital data steam over a dedicated encryption virtual channel supported by the multi-channel serial communications **interface** , and decrypts **the** re- **encrypted** digital data steam using hardware decryption **logic** (**164**) disposed on the other chip (**150**).

Claims:
...PCI-Express-compatible interface circuit configured to support data communication over a plurality of PCI- **Express** virtual channels, wherein the plurality of PCI-Express virtual channels includes an unencrypted default virtual channel and a dedicated encrypted virtual channel configured to **communicate** encrypted data exclusively, wherein the first PCI-Express-compatible interface **circuit** includes a plurality of channel interconnects, each associated with a virtual channel among the plurality ...

...interconnect among the plurality of virtual channels is coupled to the hardware encryption circuit to **receive** the encrypted data stream, and wherein the first PCI-Express- **compatible** interface circuit **is configured** to **communicate** the encrypted **data stream** from the hardware encryption circuit over the dedicated encrypted virtual channel; a second integrated circuit...
...interconnects, each associated with a virtual channel among the plurality of virtual channels; a hardware **decryption** circuit coupled to a first channel interconnect among the plurality of channel **interconnects** for the second PCI-Express-compatible interface circuit and configured to **decrypt** the encrypted data stream; and a second logic block coupled to the **hardware decryption** circuit and configured to use the **decrypted** data stream, andcontrol **logic coupled to** at least one of the **first** and second PCI-Express-compatible interface **circuits** and configured to **communicate** authorization data over the default virtual channel to authorize secure **communication** between the first and second **integrated** circuits over the dedicated encrypted virtual channel.

DIALOG(R)File 350:Derwent WPIX

0014318200 - Drawing available
WPI ACC NO: 2004-505601/200448
XRPX Acc No: N2004-399350
Read circuit in personal computer, has decryption circuit for
decrypting **data stored in media card, and another encryption/** decryption
circuit **for encrypting data and** decrypting **commands** received from bus
Patent Assignee: LUECK A (LUEC-I); MAIN K (MAIN-I); MOWERY K R (MOWE-I);
   TEXAS INSTR INC (TEXI)
Inventor: LUECK A; MAIN K; MAIN K K; MOWERY K R
Patent Family (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20040117642	A1	20040617	US 2002321315	A	20021217	200448	B
JP 2004199689	A	20040715	JP 2003418219	A	20031216	200448	E

Priority Applications (no., kind, date): US 2002321315 A 20021217

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040117642	A1	EN	8	3	
JP 2004199689	A	JA	12		

Alerting Abstract US A1
  NOVELTY - A **decryption** circuit is connected to the **bus** and the media
card, for **decrypting** data stored on the media card. Another encryption/
decryption **circuit** is connected to the **bus** and media card, for
encrypting **data** and **decrypting** commands sent on the **bus** . A driver
software subtracts the CPU for encrypting the commands and decrypting
encrypted data.
  DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

  1.secure transmission path;

  2.method of secure transmission of data and commands; and

  3.method of reading data.

  USE - In personal computer for reading secure data from FLASH media
cards.
  ADVANTAGE - Avoids unauthorized access to decrypted information, thereby
improving security of data read from media card.
  DESCRIPTION OF DRAWINGS - The figure shows the block diagram of a media
card reader .

Title Terms/Index Terms/Additional Words: READ; CIRCUIT; PERSON; COMPUTER;
  DECRYPTER; DATA; STORAGE; MEDIUM; CARD; ENCRYPTION; COMMAND; RECEIVE;
  BUS

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version

IPC	+ Level	Value	Position	Status	Version
G06F-0012/14	A	I	F	R	20060101
G06F-0021/00	A	I		R	20060101
G06F-0021/06	A	I	L	R	20060101
G06F-0021/24	A	I	L	R	20060101
G06K-0017/00	A	I	L	R	20060101
G09C-0001/00	A	I	L	R	20060101
H04L-0009/32	A	I		R	20060101
G06F-0012/14	C	I	F	R	20060101
G06F-0021/00	C	I		R	20060101
G06K-0017/00	C	I	L	R	20060101
G09C-0001/00	C	I	L	R	20060101
H04L-0009/32	C	I		R	20060101

US Classification, Issued: 713193000

File Segment: EPI;

DWPI Class: T01; T04; W01
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-H01C2; T04-K02; W01-A05A
Read circuit in personal computer, has decryption circuit **for**
decrypting **data stored in media card, and another encryption/** decryption
circuit **for encrypting data and** decrypting **commands** received **from** bus

Original Titles:
SECURE MEDIA CARD OPERATION OVER UNSECURED PCI **BUS**
...

...Secure media card operation over an unsecured PCI **bus**

   Alerting Abstract ...NOVELTY - A **decryption** circuit is connected to the
 bus and the media card, for **decrypting** data stored on the media card.
Another encryption/ **decryption** **circuit** is connected to the **bus** and
media card, for encrypting **data** and **decrypting** commands sent on the
bus . A driver **software** subtracts the CPU for encrypting the commands and
decrypting encrypted data. ...DESCRIPTION OF DRAWINGS - The figure shows
the block diagram of a media **card** **reader** .

Title Terms.../Index Terms/Additional Words: **BUS**

Original Publication Data by Authority

Original Abstracts:
...encryption function decryption circuit which remains in hardware on the
peripheral side of a PCI **bus** . The command function **generator** for the
media card is separated and performed in the CPU. All information flow
across the PCI **bus** is encrypted with **the** media encryption function or a
second encryption function such as DES so as to impede...
Claims:
...encryption function comprising: a computer having a CPU which
communicates with peripheral devices via a **bus** ; first **decryption**
circuit coupled to the bus and to **the** media card for **decrypting** data
stored on the media card utilizing **the** first encryption function; a
second encryption/ **decryption** circuit coupled to the **bus** and the media
card **for** **encrypting** **data** and **decrypting** **commands** sent on the **bus**
 utilizing a second encryption **function** ; a **driver** stored within **the**
computer for instructing the CPU to generate the commands, for encrypting
the commands and for...

  17/5,K/8   (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0013938080 - Drawing available
WPI ACC NO: 2004-118286/200412
XRPX Acc No: N2004-094475
**Data safeguarding method for communication applications, involves
translating protocol specific encrypted data stream to protected content
exchange encrypted data stream which is transferred, for decryption to
decoding device**
Patent Assignee: INTEL CORP (ITLC)
Inventor: MANGOLD R P; PFOTENHAUER J L; SHIPPY K L
Patent Family (1 patents, 1 countries)
Patent   Application
Number   Kind Date   Number   Kind Date   Update
US 6668324   B1   20031223 US 1999460537   A 19991213 200412 B

Priority Applications (no., kind, date): US 1999460537 A 19991213

Patent Details
Number   Kind Lan Pg Dwg Filing Notes
US 6668324   B1   EN   23   13

  Alerting Abstract US B1
  NOVELTY - One of the protocol specific encrypted data streams is received
by a **bus** (120) from an input device (110) and is translated into a
protected content exchange (PCX) encrypted data stream. The PCX encrypted
data stream is transferred to a decoding device (102), for decryption.
  DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. article of manufacture including computer readable medium storing instructions to execute data safeguard process;

2. recorded medium storing instructions to execute data safeguard process;

3. data safeguarding system;

4. fixed-size data stream information synchronizing method; and

5. fixed-size data stream information synchronizing system.

USE - For safeguarding transfer of data within device such as satellite receiving dish and computer or set-top box, digital versatile **disk** (**DVD**) **player** in terms of content encryption.
ADVANTAGE - The data within system, is protected from tampering or unauthorized access by self-modification of PCX module code and self-verification of PCX codes. Thus, data is protected from unwarranted hacking or copying.
DESCRIPTION OF DRAWINGS - The figure shows the system block diagram of data safeguarding system
    100 data safeguarding system
    102 decoding device
    104 safeguarding device
    106 PCX
    110 satellite, video cassette recorder (VCR)
    115 CPU

Title Terms/Index Terms/Additional Words: DATA; SAFEGUARD; METHOD; COMMUNICATE; APPLY; TRANSLATION; PROTOCOL; SPECIFIC; ENCRYPTION; STREAM; PROTECT; CONTENT; EXCHANGE; TRANSFER; DECRYPTER; DECODE; DEVICE

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
    G06F-0011/30 A I   R 20060101
    G06F-0021/00 A I   R 20060101
    G06F-0011/30 C I   R 20060101
    G06F-0021/00 C I   R 20060101
US Classification, Issued: 713189000, 713151000, 713165000, 713168000, 713193000

File Segment: EPI;
DWPI Class: T01; W01; W03
Manual Codes (EPI/S-X): T01-D01; T01-J08A; T01-S03; W01-A05A; W03-A16C3; W03-G05C1

Alerting Abstract ...NOVELTY - One of the protocol specific encrypted data streams is received by a **bus** (120) from an input device (110) and is translated into a protected content exchange (PCX...
...within device such as satellite receiving dish and computer or set-top box, digital versatile **disk** (**DVD**) **player** in terms of content encryption.

Original Publication Data by Authority

Original Abstracts:
A system and method of safeguarding data within a device are described. In one embodiment, at least one protocol specific encrypted data stream is received. The protocol specific...

...data stream is translated into a protected content exchange (PCX) encrypted data stream. In addition, **the** PCX encrypted data stream is transferred to a decoding **device** and the PCX **encrypted** data stream **decrypted.**
Claims:
...content exchange (PCX) encrypted data stream; transferring the PCX encrypted data stream to a decoding **device** ; and **decrypting** the PCX encrypted data stream

DIALOG(R)File 350:Derwent WPIX

0013879633 - Drawing available
WPI ACC NO: 2004-058513/200406
XRPX Acc No: N2004-047276
Digital multimedia content playback apparatus e.g. personal computer decrypts, decodes and downsamples multimedia content stored in DVD based on author specified parameter and renders the content to user
Patent Assignee: INTEL CORP (ITLC)
Inventor: LYDECKER G H; MALISZEWSKI R L; MCPHERSON A J; MOORER J A; TRAW B
S

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 6662060	B1	20031209	US 1999420185	A	19991018	200406	B

Priority Applications (no., kind, date): US 1999420185 A 19991018

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6662060	B1	EN	9	3	

Alerting Abstract US B1
NOVELTY - An access module (24) controlling access to multimedia content from DVD (14) has decrypter (26) that decrypts multimedia content which is decoded by decoder (28). A downsampler (30) downsamples decoded content to render the content to user. The decrypting, decoding and downsampling are controlled based on author specified parameters such as filter characteristics, transfer characteristics, sampling rate, downsampling algorithm.
DESCRIPTION - An INDEPENDENT CLAIM is also included for article of manufacture comprising storage medium storing digital multimedia content playback program.
USE - For reproducing digital multimedia content from DVD using DVD-ROM drive of personal computer.
ADVANTAGE - The multimedia content is reproduced efficiently corresponding to author specified parameters.
DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the multimedia playback system.
    10 processing system
    12 DVD-ROM drive
    14 DVD
    22 player application
    24 DVD access module
    26 decrypter
    28 decoder
    30 downsampler
    32 auto-installer script

Title Terms/Index Terms/Additional Words: DIGITAL; CONTENT; PLAYBACK; APPARATUS; PERSON; COMPUTER; DECODE; STORAGE; BASED; SPECIFIED; PARAMETER ; RENDER; USER

Class Codes
International Classification (Main): H04N-007/04
US Classification, Issued: 700094000, 386095000, 386096000, 386105000

File Segment: EPI;
DWPI Class: T01; T03
Manual Codes (EPI/S-X): T01-D01; T01-H01B2; T03-B05; T03-B06C; T03-N01

Alerting Abstract ...32 auto-installer script

Original Publication Data by Authority

Claims:
...playback of digital multimedia content stored on a removable storage

medium in an author-controlled **title** **specific** **manner** , **comprising** :
a **player** application to render the digital multimedia content **for** **a**
user; an auto-installer script for automatically installing the **player**
application; at least one access module, bundled with the **auto** - **installer**
 script and the **player** application on the **removable** **storage** **medium** ,
to **control** access to the digital **multimedia** content; wherein the **at**
least **one** access module includes a **decryptor** to **decrypt** the digital
multimedia content to produce **decrypted** **content** according to the
author- **controlled** title **specific** parameters, a decoder **to** provide a
user with an interface according to the author-controlled title specific
parameters and decode and **decompress** the decrypted **content** to produce
decoded content in response to a user input, and a downsampler to
downsample...

...access module to provide a user with an interface and control at least
one of **decrypting** , decompressing, decoding and downsampling of the
digital multimedia **content** , in an author controlled title specific
manner.

 17/5,K/10 **(Item 10 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
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0013059097 - Drawing available
WPI ACC NO: 2003-138833/ **200313**
XRPX Acc No: N2003-110162
Multimedia content distribution apparatus for CD player , **cell phone,**
transfers contents to playback device by secure communication after mutual
authentication of distribution and playback devices
Patent Assignee: GEN INSTR CORP (GENN)
Inventor: DEPIETRO M; SAFADI R
Patent Family (1 patents, 1 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
US 20020147686	A1	20021010	US 2001826820	A	20010406	200313 B

Priority Applications (no., kind, date): US 2001826820 A 20010406

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20020147686	A1	EN	12	4	

 Alerting Abstract US A1
 NOVELTY - A distribution device interfaced to a network, determines
permission to make copies of content and registers at least one playback
device to trace the content distributed to the playback device. The
distribution device and the playback device are authenticated with respect
to each other, and contents are transferred from the distribution device to
the playback device by initiating secure communication.
 DESCRIPTION - An INDEPENDENT CLAIM is included for multimedia content
distribution method.
 USE - For distributing multimedia contents including audio recordings,
audio-visual programming, analog programming, digital broadcast or
on-demand MPEG-2 programming or webcast streaming media from distribution
devices such as personal versatile recorder (PVR) integrated with set-top
terminal to **receiver** /playback devices such as PC, optical **disk** **player**
e.g. **CD** **player** and digital **DVD** **player** , portable digital audio
player , MP3 **player** , video **player** , cell phone, etc., in home, **vehicles**
 or office through personal area network (PAN).
 ADVANTAGE - Allows consumers to transfer content among multiple devices
in a transparent manner to the content type and devices. Prevents
unauthorized distribution and reproduction of content transferred by the
system operator over a delivery network.
 DESCRIPTION OF DRAWINGS - The figure shows the flowchart explaining the
retrieval of multimedia content.
 Title Terms/Index Terms/Additional Words: CONTENT; DISTRIBUTE; APPARATUS;
 CD; PLAY; CELL; TELEPHONE; TRANSFER; PLAYBACK; DEVICE; SECURE;
 COMMUNICATE; AFTER; MUTUAL; AUTHENTICITY

Class Codes
International Classification (+ Attributes)

IPC + Level Value Position Status Version
  G06F-0021/00 A I   R 20060101
  H04N-0005/00 A I   R 20060101
  H04N-0007/167 A I   R 20060101
  G06F-0021/00 C I   R 20060101
  H04N-0005/00 C I   R 20060101
   H04N-0007/167 C I   R 20060101
US Classification, Issued: 705051000

File Segment: EPI;
DWPI Class: T01; T03; W01
Manual Codes (EPI/S-X): T01-D01; T03-P07; W01-A05B

Multimedia content distribution apparatus for CD player, cell phone, transfers contents to playback device by secure communication after mutual authentication of distribution...

  Alerting Abstract ...from distribution devices such as personal versatile recorder (PVR) integrated with set-top terminal to **receiver**/playback devices such as PC, optical **disk player** e.g. **CD player** and digital **DVD player**, portable digital audio **player**, MP3 **player**, video **player**, cell phone, etc., in home, **vehicles** or office through personal area network (PAN...

Original Publication Data by Authority

Original Abstracts:
...least one playback device, in accordance with rights established by the system operator or the **content** provider, where the content is **decrypted** for subsequent playback **by** the authorized **device**(s). The method **also** addresses illegal propagation of content. Basic Derwent Week: **200313**

 17/5,K/11   (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0012943356 - Drawing available
WPI ACC NO: 2003-020100/ **200301**
XRPX Acc No: N2003-015519
Payment card reader reads stored pseudo number and password for matching with password stored in memory
Patent Assignee: AN H G (ANHG-I); WOORI TECHNOLOGY INC (WOOR-N)
Inventor: AN H; AN H G
Patent Family (3 patents, 98 countries)
Patent   Application
Number   Kind Date   Number   Kind   Date   Update
WO 2002095670 A1 20021128 WO 2002KR980   A 20020523 200301 B
KR 2002090375 A   20021205 KR 200128390   A 20010523 200325 E
AU 2002303005 A1 20021203 AU 2002303005 A 20020523 200452 E

Priority Applications (no., kind, date): KR 200128390 A 20010523

Patent Details
Number   Kind Lan Pg Dwg Filing Notes
WO 2002095670 A1 EN   26   4
National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY
   BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID
   IL IN IS JP KE KG KP KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO
   NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN
   YU ZA ZM ZW
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH
   GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
AU 2002303005   A1 EN   Based on OPI patent   WO 2002095670

  Alerting Abstract WO A1
  NOVELTY - **Card** reader comprises a **reader** for the encrypted pseudo number stored on the **IC card**, a password input **unit**, a **processor** generating a one-time user number based on the password and **decrypting** the pseudo number for a display, and a **data** port **transmitting** the user number to the agency number, its terminal being a communication device for

a settlement and authentication system. The password is stored in a memory for matching with the input password.
  DESCRIPTION - There are INDEPENDENT CLAIMS for:

  1. A settlement system connected through a network to an agency terminal

  2. A settlement method

  USE - **Card reader** is for **cards** with **ICs** **and** interfacing with **PCs**
  DESCRIPTION OF DRAWINGS - The figure shows a flow chart of a settlement method using the **card reader** .

Title Terms/Index Terms/Additional Words: PAY; CARD; READ; STORAGE; PSEUDO; NUMBER; PASSWORD; MATCH; MEMORY

Class Codes
International Classification (Main): G06K-017/00

File Segment: EPI;
DWPI Class: T01; T04; T05
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-J05A; T04-K02; T05-L01B

Payment card reader **reads stored pseudo number and password for matching with password stored in memory**

Original Titles:
  CARD READER , AND SETTLEMENT AND AUTHENTICATION SYSTEM USING THE **CARD READER**
  . . .

  . . . **CARD READER** , AND SETTLEMENT AND AUTHENTICATION SYSTEM USING THE **CARD READER**
  Alerting Abstract ...NOVELTY - **Card** reader comprises a **reader** for the encrypted pseudo number stored on the **IC card** , a password input **unit** , a **processor** generating a one-time user number based on the password and **decrypting** the pseudo number for a display, and a **data** port **transmitting** the user number to the agency number, its terminal being a communication device for a...
  ...USE - **Card reader** is for **cards** with **ICs** **and** interfacing with **PCs**
    . . .

  ...DESCRIPTION OF DRAWINGS - The figure shows a flow chart of a settlement method using the **card reader** .

Original Publication Data by Authority

Original Abstracts:
  Disclosed is a card **reader** , and a settlement/ **authentication** system and method using the same. The card **reader** reads a pseudo **number** stored in an IC **card** , decrypts it, and **generates** a one-use user number on the basis of the decrypted pseudo number and the password input through an input unit. The **card reader** is connected **to** **an** agency terminal (e.g., a PC), and the agency terminal provides the user number provided by the **car reader** to the **settlement** / **authentication** system on the network so as to request a transaction settlement or user authentication on
  . . .
  . . .
  . . .

  17/5,K/12   (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0012939287   - Drawing available
WPI ACC NO: 2003-015918/ **200301**
XRPX Acc No: N2003-011853
Digital broadcast receiver **e.g. TV,** set-top box, decodes scramble key using key in integrated circuit card **and re-encodes scramble key using encoding key generated based on ID of** receiver

Patent Assignee: HITACHI LTD (HITA); KOHIYAMA T (KOHI-I); MORINO H
  (MORI-I); OKAYAMA M (OKAY-I); TOMOKANE T (TOMO-I)
Inventor: KOHIYAMA T; MORINO H; MORINO T; OKAYAMA M; OKAYAMA Y; TOMOKANE T
Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20020101990	A1	20020801	US 2001793114	A	20010227	200301	B
JP 2002305512	A	20021018	JP 200191685	A	20010328	200301	E
JP 3925095	B2	20070606	JP 200191685	A	20010328	200737	E

Priority Applications (no., kind, date): JP 200125011   A   20010201

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20020101990	A1	EN	22	13	
JP 2002305512	A	JA	13		
JP 3925095	B2	JA	16		Previously issued patent JP 2002305512

Alerting Abstract US A1
   NOVELTY - A tuner (11) receives encrypted digital contents and a scramble
key. A local CPU (15) decodes the scramble key using a key in an integrated
circuit (IC) card (16). A key encoder (19) re-encodes the scramble key,
using encoding key generated based on the ID of the viewer and an arbitrary
random number which is multiplied with decoded contents and output to an
external apparatus.
   DESCRIPTION - An INDEPENDENT CLAIM is included for data reproducing
apparatus.
   USE - Digital satellite broadcast receiver such as television receiver,
set-top box that receives data from satellites, and other networks such as
Internet, LAN and connected to information processor such as personal
computer, workstation and mobile phone, etc., and data reproducing
apparatus (claimed) such as video recorder.
   ADVANTAGE - As the scramble key is decoded using the key in the IC card,
key management is made simpler and easier. As the scramble key is
re-encoded, copyright protection of the content is enabled.
   DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the
information processing apparatus.
   11 Tuner
   15 CPU
   16 IC card
   19 Key encoder

Title Terms/Index Terms/Additional Words: DIGITAL; BROADCAST; RECEIVE;
  TELEVISION; SET; TOP; BOX; DECODE; SCRAMBLE; KEY; INTEGRATE; CIRCUIT;
  CARD; ENCODE; GENERATE; BASED; ID

Class Codes
International Classification (+ Attributes)

IPC + Level	Value	Position	Status	Version
H04H-0001/00 A I	L	R	20060101	
H04L-0009/08 A I	F	R	20060101	
H04N-0005/00 A I		R	20060101	
H04N-0007/16 A I		R	20060101	
H04N-0007/167 A I		R	20060101	
H04L-0009/08 A I	F	B	20060101	
H04L-0009/14 A I	L	B	20060101	
H04N-0007/16 A I	L	B	20060101	
H04H-0001/00 C I	L	R	20060101	
H04L-0009/08 C I	F	R	20060101	
H04N-0005/00 C I		R	20060101	
H04N-0007/16 C I		R	20060101	
H04N-0007/167 C I		R	20060101	
H04L-0009/08 C I		B	20060101	
H04L-0009/14 C I		B	20060101	
H04N-0007/16 C I		B	20060101	

US Classification, Issued: 725031000, 380210000

File Segment: EPI;
DWPI Class: T01; T04; W03
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-N02A3A; T04-K02;
  W03-A16C3A; W03-A16C3C

Digital broadcast receiver e.g. TV, set-top box, decodes scramble key
using key in integrated circuit card and re-encodes scramble key using
encoding key generated based on ID of receiver

Original Publication Data by Authority

Original Abstracts:
...using the encipher key, a key storage area for storing the decipher key,
and a **bus** I/F unit for transferring the re-enciphered scramble key and
enciphered contents to an...
Claims:
...receiving data enciphered by a first encipher key; andan encipher unit
connected to a **decipher** unit for **deciphering** at least one of the
received data and the data **decipher** key enciphered by a second encipher
key, said encipher **unit** enciphering the data **deciphered** or the data
decipher key by a re-encipher key,wherein the re-enciphered data or the
data decipher...
Basic Derwent Week: **200301**

 17/5,K/15   (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0010637226 - Drawing available
WPI ACC NO: 2001-244254/ **200125**
XRPX Acc No: N2001-173887
Memory card, for storing e.g. downloaded MP3 files, encrypts session key
extracted from using public key encryption and transmits it to a server
Patent Assignee: FUJITSU LTD (FUIT); HITACHI LTD (HITA); NIPPON COLUMBIA
   KK (NPCO); SANYO ELECTRIC CO LTD (SAOL); DENON CO LTD (NPCO); RENESAS
   TECHNOLOGY KK (RENE-N)
Inventor: ANAZAWA T; ANAZAWA T N C C L; FURUTA S; FURUTA S F L; HASEBE T;
   HASEBE T F L; HATAKEYAMA T; HATAKEYAMA T F L; HATANAKA M; HATANAKA M F L;
   HIOKI T; HIOKI T S E C L; HORI Y; HORI Y S E C L; KAMADA; KAMADA F L;
   KAMADA J; KANAMORI M; KANAMORI M S E C L; KOTANI S; KOTANI S F L;
   TONEGAWA T; TONEGAWA T S; HATANABE M
Patent Family (10 patents, 94 countries)

Pat ent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2001013358	A1	20010222	WO 2000JP5339	A	20000809	200125	B
AU 200063212	A	20010313	AU 200063212	A	20000809	200134	E
EP 1209657	A1	20020529	EP 2000950052	A	20000809	200243	E
			WO 2000JP5339	A	20000809		
CN 1377497	A	20021030	CN 2000813671	A	20000809	200314	E
JP 2001517375	X	20030311	WO 2000JP5339	A	20000809	200319	E
			JP 2001517375	A	20000809		
TW 499668	A	20020821	TW 2001102962	A	20010209	200333	E
US 6999948	B1	20060214	WO 2000JP5339	A	20000809	200613	E
			US 200248482	A	20020208		
US 20060116969	A1	20060601	WO 2000JP5339	A	20000809	200637	E
			US 200248482	A	20020208		
			US 2005263017	A	20051101		
CN 1248143	C	20060329	CN 2000813671	A	20000809	200713	E
JP 4009108	B2	20071114	WO 2000JP5339	A	20000809	200778	E
			JP 2001517375	A	20000809		

Priority Applications (no., kind, date): JP 1999226406 A 19990810; JP
   1999349336 A 19991208

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001013358	A1	JA	127	43	

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY
   BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
   IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
   PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH
   GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

| AU 200063212 | | A | EN | | Based on OPI patent WO 2001013358 |

EP 1209657   A1   EN   PCT Application   WO 2000JP5339
                                        Based on OPI patent   WO 2001013358
Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR
    IE IT LI LT LU LV MC MK NL PT RO SE SI
JP 2001517375   X   JA   PCT Application   WO 2000JP5339
                                        Based on OPI patent   WO 2001013358

TW 499668   A   ZH
US 6999948   B1   EN   PCT Application   WO 2000JP5339
                                        Based on OPI patent   WO 2001013358

US 20060116969   A1   EN   Continuation of application   WO
    2000JP5339
                                        Continuation of application   US
    200248482
                                        Continuation of patent   US 6999948
JP 4009108   B2   JA   61   PCT Application   WO 2000JP5339
                                        Based on OPI patent   WO 2001013358

Alerting Abstract WO A1

NOVELTY - The memory card extracts a session key (Ks) by decoding data
provided on a data **bus** (BS3). An encryption unit (1406) encrypts a public
key KPcard of based on the session key (Ks) and sends it to a server over
the data **bus** (BS3). Each memory (1412) stores data, such as a license key
(Kc) encrypted by a unique public key Kpcard, license ID, and user ID,
received from server, and stores content data (Dc]Kc) encrypted by license
key (Kc) and supplied over the data **bus** .

USE - Memory **card** which can be used for licensed storage of downloaded
music files received from a server, e.g. for playback in a portable
telephone equipped with an MP3 **player** .

DESCRIPTION OF DRAWINGS - The figure is a block diagram of the memory
card. (Drawing includes non-English text).
    110 Memory card
    Ks Session key
    BS3 Data **bus**
    1406 Encryption means
    1412 Memory

Title Terms/Index Terms/Additional Words: MEMORY; CARD; STORAGE; FILE;
    SESSION; KEY; EXTRACT; PUBLIC; ENCRYPTION; TRANSMIT; SERVE

Class Codes

International Classification (Main): G10K-015/02, G10K-015/04
 (Additional/Secondary): G01L-019/00, G06F-015/00, G06F-017/60, G06K-019/00
 , G06K-019/07, G10L-015/00, H04H-001/00, H04L-009/08, H04L-009/32,
 H04M-011/08, H04M-003/42, H04M-003/493
International Classification (+ Attributes)
IPC + Level Value Position Status Version

IPC	+	Level	Value	Position	Status	Version
G06F-0021/00	A	I		R		20060101
G06F-0021/00	A	I	F			20060101
G11B-0020/00	A	N		R		20060101
H04L-0029/06	A	I		R		20060101
H04L-0029/06	A	I	L			20060101
H04L-0009/00	A	I	F	B		20060101
G06F-0021/20	A	I	L	B		20060101
G06F-0021/24	A	I	L	B		20060101
G06K-0019/07	A	I	L	B		20060101
G06Q-0050/00	A	I	L	B		20060101
G10K-0015/02	A	I	F	B		20060101
G10L-0019/00	A	I	L	B		20060101
H04H-0001/00	A	I	L	B		20060101
H04L-0009/08	A	I	L	B		20060101
H04L-0009/32	A	I	L	B		20060101
H04M-0011/08	A	I	L	B		20060101
H04M-0003/42	A	I	L	B		20060101
H04M-0003/493	A	I	L	B		20060101
G06F-0021/00	C	I		R		20060101
G06F-0021/00	C	I	F			20060101
G11B-0020/00	C	N		R		20060101
H04L-0029/06	C	I		R		20060101
H04L-0029/06	C	I	L			20060101
H04L-0009/00	C	I	L	B		20060101
G06F-0021/00	C	I		B		20060101
G06K-0019/07	C	I		B		20060101

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G06Q-0050/00    C   I       B   20060101
G10K-0015/02    C   I       B   20060101
G10L-0019/00    C   I       B   20060101
H04H-0001/00    C   I       B   20060101
H04L-0009/08    C   I       B   20060101
H04L-0009/32    C   I       B   20060101
H04M-0011/08    C   I       B   20060101
H04M-0003/42    C   I       B   20060101
H04M-0003/487   C   I       B   20060101
```
US Classification, Issued: 705071000, 713150000, 713171000, 705051000,
   705052000, 705057000, 705058000, 705059000, 705064000, 380200000,
   380201000, 380202000, 380203000, 380277000, 380282000, 705065000
File Segment: EngPI; EPI;
DWPI Class: T01; T04; W01; W02; W03; W04; P86
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-H07C3A; T01-M06A1; T04-K01
   ; W01-A05A; W01-A05B; W01-C01D3C; W01-C01P9; W01-C05B5A; W02-F10C;
   W02-F10N3; W03-A16C3C; W03-A16C5C; W04-G01B9

   Alerting Abstract ...The memory card extracts a session key (Ks) by
decoding data provided on a data **bus** (BS3). An encryption unit (1406)
encrypts a public key KPcard of based on the session key (Ks) and sends it
to a server over the data **bus** (BS3). Each memory (1412) stores data, such
as a license key (Kc) encrypted by a...

...stores content data (Dc]Kc) encrypted by license key (Kc) and supplied
over the data **bus** . USE - Memory **card** which can be used for licensed
storage of downloaded music files received from a server, e.g. for playback
in a portable telephone equipped with an MP3 **player** .
   ...

...BS3 Data **bus**

Original Publication Data by Authority

Original Abstracts:
...memory card 110 extracts a session key Ks from the data applied onto a
data **bus** BS3 by carrying out a **decryption** process. An encryption
processing **unit** 1406 encrypts a public encryption key KPcard(1) of memory
card 110 based on session key Ks, and applies the encrypted key to a server
via **data** **bus** BS3. A memory 1412 **receives** from a server **data** such as
license key Kc, license ID data License-ID and user ID data User...

...storage, and receives encrypted content data [Dc]Kc encrypted with
license key Kc from data **bus** BS3 for storage...

...memory card 110 extracts a session key Ks from the data applied
onto a data **bus** BS3 by carrying out a **decryption** process. An
encryption processing **unit** 1406 encrypts a public encryption key
KPcard(1) of memory card 110 based on session key Ks, and
applies the encrypted key to a server via **data** **bus** BS3. A memory
1412 **receives** from a server **data** such as license key Kc, license
ID data License-ID and user ID data User...

...storage, and receives encrypted content data [Dc]Kc encrypted with
license key Kc from data **bus** BS3 for storage...

...memory card 110 extracts a session key Ks from the data applied
onto a data **bus** BS3 by carrying out a **decryption** process. An
encryption processing **unit** 1406 encrypts a public encryption key
KPcard(1) of memory card 110 based on session key Ks, and applies
the encrypted key to a server via **data** **bus** BS3. A memory
1412 **receives** from a server **data** such as license key Kc, license
ID data License-ID and user ID data User...

...storage, and receives encrypted content data [Dc]Kc encrypted with
license key Kc from data **bus** BS3 for storage...

...memory card (110) extracts a session key (Ks) by decoding data provided
on a data **bus** (BS3). Encryption means (1406) encrypts a public key KPcard
(1) of the memory card (110) based on the session key (Ks) and sends it to

a server over the data **bus** (BS3). Each memory (1412) stores data, such as a license key (Kc) encrypted by a...

...content data ([Dc]Kc) encrypted by the license key (Kc) and supplied over the data **bus** (BS3...
...qui, pour extraire une clef de session (Ks), decode les donnees se presentant sur un **bus** (BS3) de donnees. Un dispositif de cryptage (1406) crypte une KPcarte (1) a clef publique...

...base de la clef de session (Ks), et l'envoie a un serveur via le **bus** (BS3) de donnees. Chaque memoire (1412) stocke non seulement les donnees recues du serveur, notamment...

...Dc]Kc) de contenu, cryptees par la clef de licence (Kc), se presentant sur le **bus** (BS3) de donnees.
Claims:
A memory card to receive **and** record encrypted content data, comprising:a first key hold **unit** (1402) storing a first private **decryption** key to **decrypt** data encrypted with a predetermined first public encryption key corresponding to said memory card,a first **decryption** processing **unit** (1404) receiving a first symmetric key updated and distributed for each **communication** of said encrypted content **data** , and encrypted with said first public encryption key to apply a **decryption** process,a second key hold **unit** (1405) to store a second public encryption key unique to each memory card,a first...

...on said first symmetric key, and providing the encrypted second public encryption key,a second **decryption** processing **unit** (1410) **receiving** a **content** key encrypted with said second public encryption key, and further encrypted with said first symmetric...

...output to an external source,a second key hold unit (1402) storing a first private **decryption** key to **decrypt** data encrypted with the first public encryption key,a first **decryption** processing **unit** (1404) receiving said first symmetric key updated and transmitted for each **communication** of said **decryption** information **data** , and encrypted with said first public encryption key to apply a decryption process,a third...

...What is claimed is:1. A memory card to receive and record content key to **decrypt** content data comprising:a first key hold **unit** storing a first private **decryption** key to **decrypt** data encrypted with a predetermined first public encryption key corresponding to said memory card,a first **decryption** processing **unit** receiving a first symmetric key updated and distributed for each **communication** of a **content** key, and encrypted with said first public encryption key to apply a **decryption** process,a second key hold **unit** to store a second public encryption key unique to each memory card,a first encryption...
...on said first symmetric key, and providing the encrypted second public encryption key,a second **decryption** processing **unit** **receiving** said **content** key encrypted with said second public encryption key, and further encrypted with said first symmetric...

...key to decrypt data encrypted with said second public encryption key,a third decryption processing **unit** to decrypt said content key using said second private **decryption** key, based on data stored in said first storage

unit , anda control **unit** controlling operation of said memory card according to an operation mode designate from an external...

...wherein said first storage unit receives and stores said encrypted content data that can be **decrypted** based on said content key,wherein said first encryption processing unit under control of said...
Basic Derwent Week: **200125**

XRPX Acc No: N2001-102048
Information exchange device for transmitting, receiving and displaying information for use in e-commerce and banking transactions, with card reading and writing facilities
Patent Assignee: CITICORP DEV CENT INC (CITI-N)
Inventor: DO C D; RIZZO C J; WILLIAMS L
Patent Family (3 patents, 24 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 1061482	A1	20001220	EP 2000202089	A	20000616	200115	B
EP 1061482	B1	20040204	EP 2000202089	A	20000616	200410	E
DE 60008042	E	20040311	DE 60008042	A	20000616	200419	E
			EP 2000202089	A	20000616		

Priority Applications (no., kind, date): US 1999139732 P 19990618; EP 2000202089 A 20000616

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 1061482	A1	EN	23	13	

Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR
  IE IT LI LT LU LV MC MK NL PT RO SE SI

EP 1061482	B1	EN			

Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR
  IE IT LI LT LU LV MC MK NL PT RO SE SI

DE 60008042	E	DE			Application EP 2000202089
					Based on OPI patent EP 1061482

Alerting Abstract EP A1
NOVELTY - The information exchange device includes a communications module which wirelessly transmits verification information associated with an authorized user of the information exchange device, to enable verification of whether the user of the device is an authorized user.
DESCRIPTION - The personal financial assistant includes magnetic and smart card reading and writing capability, financial software and automatic communications capabilities to interface with automated teller machines (ATMs) or other Personal Digital Assistants (PDAs). The device also includes a radio frequency transceiver, an infrared data association transceiver, data encryption standard processor and flash memory.
INDEPENDENT CLAIMS are included for; an information and transaction processing system, a method for performing an electronic transaction with an information and transaction processing system.
USE - Universal card system for transmitting, receiving and displaying information for e-commerce and banking functions. For installation as part of a system to serve individuals located in e.g. kiosk, **car**, **aircraft** etc.
ADVANTAGE - Allows financial institutions to quickly and effectively tailor information to specific individuals.
DESCRIPTION OF DRAWINGS - The drawing shows a perspective view of one embodiment of the invention.
  1 User interface
  2 Display
  3 Universal card
  4 **Card reader**/writer
  5 Docking port

Title Terms/Index Terms/Additional Words: INFORMATION; EXCHANGE; DEVICE; TRANSMIT; RECEIVE; DISPLAY; BANK; TRANSACTION; CARD; READ; WRITING; FACILITY

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
  G07F-0007/10 A I R 20060101
  G07F-0007/10 C I R 20060101

File Segment: EPI;
DWPI Class: T01; T05; W01
Manual Codes (EPI/S-X): T01-J05A1; T01-M06A1A; T05-H02C5; T05-L02;
  T05-L03C1; W01-A07H2; W01-A07H3

Alerting Abstract ...For installation as part of a system to serve

individuals located in e.g. kiosk, **car** , **aircraft** etc...

...4 **Card** **reader** /writer...

Original Publication Data by Authority

Claims:
...operatively connected to said user interface for controlling the
operation of said device; a memory **component** operatively connected to
said central processing unit, for storing information and software; an
encryption/decryption...

...wireless data transmission between said device and a terminal when said
device is within a **communications** range of said terminal; and wherein
said **communications** module wirelessly transmits verification information
associated with an authorized user of said device to **enable** verification
of **whether** said **user** of said device is said authorized user...

...operatively connected to said central processing unit (24), for storing
information and software; a communications **module** (28,29) within the
device (100; 200; 300) for enabling transmission of data (43), an...

...40) to verify whether said user of said device is said authorized user;
characterised in **that** said terminal (40) is an automated teller
machine and that said communications module (28,29) enables, without said
user's prompt, said wireless **data** **transmission** between said device
(100; **200** ; 300) **and** said terminal (40) when said device (100; 200; 300)
is within a communications range of...
Basic Derwent Week: **200115**

 17/5,K/17 **(Item 17 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0010143252 - Drawing available
WPI ACC NO: 2000-451696/ **200039**
XRPX Acc No: N2000-336325
Prevention of unauthorized copying of audio files from master disk ,
involves sending encrypted data and key to player **where key is decrypted**
using private key, for data decryption
Patent Assignee: MEMORY CORP TECHNOLOGY LTD (MEMO-N)
Inventor: OXLEY D P; TAYLOR R M
Patent Family (4 patents, 6 countries)

Patent			Application				
Number	Kind	Date	Number	Kind	Date	Update	
WO 2000031744	A1	20000602	WO 1999GB3877	A	19991119	200039	B
GB 2359165	A	20010815	WO 1999GB3877	A	19991119	200147	E
			GB 200111943	A	20010516		
TW 451216	A	20010821	TW 1999120479	A	19991122	200239	E
GB 2359165	B	20030423	WO 1999GB3877	A	19991119	200329	E
			GB 200111943	A	20010516		

Priority Applications (no., kind, date): GB 199825337 A 19981119

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2000031744	A1	EN	41	8	
National Designated States,Original:					GB JP KR SG US
GB 2359165	A	EN			PCT Application WO 1999GB3877
					Based on OPI patent WO 2000031744
TW 451216	A	ZH			
GB 2359165	B	EN			PCT Application WO 1999GB3877
					Based on OPI patent WO 2000031744

 Alerting Abstract WO A1

 NOVELTY - Unique registration codes and private keys are provided to the
data **player** . Data sent from a copying **unit** to a copy management **unit**
is encrypted and a **decryption** key provided in the management **unit** is
encrypted using the codes. The encrypted **data** keys are **sent** to a flash
memory **card** of the **player** . Using the private key, the encrypted key is

decrypted to decrypt data in the **card** .
   DESCRIPTION - The maximum preset number of registration codes of each
data player are stored in the memory of the copy management **unit** . The
decryption key provided in the management units may be the same or
different from the encryption used to encrypt copied **data** . The private
key **provided** for each player may be the same or different from the
registration code. Storing of new codes in the memory of the management
unit is withheld for a specific period.
   INDEPENDENT CLAIMS are also included for the following:

   1. a copy management apparatus; and

   2. a data copying and playback system.

   USE - For preventing unauthorized copying of data such as copying of
audio files from master compact disks or DVD, or the downloading of music
auto portable solid state memory audio players such **as** portable players,
home stereo units or **car** stereo units from the internet.
   ADVANTAGE - The private key, when provided separate from a registration
code, can be held in a tamper-proof location in the player without
revealing to the user, hence only the code is user-accessible to maintain
secrecy.
   DESCRIPTION OF DRAWINGS - The figure shows a flowchart of the
unauthorized copy prevention process.

Title Terms/Index Terms/Additional Words: PREVENT; COPY; AUDIO; FILE;
   MASTER; DISC; SEND; ENCRYPTION; DATA; KEY; PLAY; PRIVATE; DECRYPTER

Class Codes
International Classification (Main): G11C-007/00
International Classification (+ Attributes)
IPC + Level Value Position Status Version

IPC	Level	Value	Position	Status	Version
G06F-0001/00	A	I		R	20060101
G11C-0007/00	A	I		R	20060101
G11C-0007/16	A	I		R	20060101
H04L-0009/00	A	I		R	20060101
G06F-0001/00	C	I		R	20060101
G11C-0007/00	C	I		R	20060101
H04L-0009/00	C	I		R	20060101

File Segment: EPI;
DWPI Class: W04
Manual Codes (EPI/S-X): W04-C10A3; W04-F01L1

Prevention of unauthorized copying of audio files from master disk ,
involves sending encrypted data and key to player **where key is decrypted
using private key, for data decryption**

   Alerting Abstract ...NOVELTY - Unique registration codes and private keys
are provided to the data **player** . Data sent from a copying **unit** to a
copy management **unit** is encrypted and a **decryption** key provided in the
management **unit** is encrypted using the codes. The encrypted **data** keys
are **sent** to a flash memory **card** of the **player** . Using the private key,
the encrypted key is decrypted to decrypt data in the **card** . ...
registration codes of each data player are stored in the memory of the copy
management **unit** . The **decryption** key provided in the management units
may be the same or different from the encryption used to encrypt copied
data . The private key **provided** for each player may be the same or
different from the registration code. Storing of...

...copying of audio files from master compact disks or DVD, or the
downloading of music **auto** portable solid state memory audio players such
as portable players, home stereo units or **car** stereo units from the
internet.

Original Publication Data by Authority

Original Abstracts:
...method and apparatus for controlling unauthorised copying of music onto
portable solid state memory audio **player** devices (2), or **onto** removable

solid state memory **cards** (3) for use **with** such portable **player**
devices. A data **copying** and playback system incorporating copy management
is also claimed...
...
Basic Derwent Week: **200039** ...

17/5,K/18 (Item 18 from file: 350)

0009954251 - Drawing available
WPI ACC NO: 2000-256032/ **200022**
Related WPI Acc No: 2004-793473; 2004-820422
XRPX Acc No: N2000-190361
**Initialization, configuration and resource management system for
multipurpose integrated circuit card using personal computer**
Patent Assignee: MICROSOFT CORP (MICT)
Inventor: BARLOW D; DILLAWAY B; FOX B; LIPSCOMB T; SPIES T
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 6038551	A	20000314	US 1996647199	A	19960311	200022	B

Priority Applications (no., kind, date): US 1996647199 A 19960311

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6038551	A	EN	26	12	

  Alerting Abstract US A
  NOVELTY - The system has an application-independent application interface
(96) executed on a computer to implement services utilized by a
computer-implemented application and to facilitate user access to certain
resources provided by an IC card.
  DESCRIPTION - The multipurpose IC **card** has several resources for
different uses. A **card reader** interfaces with the IC **card** to transfer
information to and from the IC **card** . A computer is coupled to the **card
reader** to implement one application and to enable a user to access and
manage select resources from the IC **card** . INDEPENDENT CLAIMS are also
included for the following:

  1.the computer-implemented application program interface;

  2.the computer used in configuration and resource management of IC card;

  3.the configuration system of the IC card;

  4.the IC card;

  5.and the cryptographic function support method.

  USE - For initializing, configuring and managing various resources of
multipurpose IC card e.g. smart card, PC card, used in e.g. banking,
electronic commerce, travel transaction, entertainment.
  ADVANTAGE - Secures management and transportation of
cryptographic-related resources, e.g. keys, certificates, from one location
to another. Provides uniform platform for conducting electronic
transactions in different environments. Ensures use of IC card in
encryption, decryption and authentication. Provides consistent presentation
and method for managing IC card resources which **are** independent from
the applications being supported. Allows examination of **resources** of IC
card using icon representations of resources. Ensures that user can
configure his or her IC card by adding and removing resources simply by
manipulating the graphical icons. Also enables user to initialize IC card
and change passcode in accessing IC card.
  DESCRIPTION OF DRAWINGS - The figure is a diagrammatic illustration of a
graphical screen generated according to the card manager user interface
executed on the computer.
  96 Application-independent application interface

Title Terms/Index Terms/Additional Words: INITIALISE; CONFIGURATION; RESOURCE; MANAGEMENT; SYSTEM; MULTIPURPOSE; INTEGRATE; CIRCUIT; CARD; PERSON; COMPUTER

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
  G07F-0007/10 A I   R 20060101
  G07F-0007/10 C I   R 20060101
US Classification, Issued: 705041000, 705044000, 380024000, 380025000, 235380000

File Segment: EPI;
DWPI Class: T01; T04; T05
Manual Codes (EPI/S-X): T01-D01; T01-F06; T01-H01B3A; T01-J05A1; T04-K01; T05-L02; T05-L03

  Alerting Abstract DESCRIPTION - The multipurpose IC **card** has several resources for different uses. A **card** **reader** interfaces with the IC **card** to transfer information to and from the IC **card** . A computer is coupled to the **card** **reader** to implement one application and to enable a user to access and manage select resources from the IC **card** . INDEPENDENT CLAIMS are also included for the following...

...to another. Provides uniform platform for conducting electronic transactions in different environments. Ensures use of IC card in encryption, decryption and authentication. Provides consistent presentation and method for managing IC card resources which **are** independent from the applications being supported. Allows examination of **resources** of IC card using icon representations of resources. Ensures that user can configure his or her IC

Original Publication Data by Authority

Original Abstracts:
...change passcodes for access to the card resources. The IC card itself provides the electronic **vehicle** for securely transporting the user's private keys and certificates without exposing them in plaintext...
Claims:
...least one computer-implemented application to access and manage a multi-purpose integrated circuit (IC) **card** , the **system** comprising:a multi-purpose integrated circuit (IC) **card** having a plurality **of** resources for different uses;a **card** **reader** which interfaces with the IC **card** to transfer information to and **from** the IC **card** ;a computers coupled to the **card** **reader** , to implement at least one application **to** **enable** a user to access and manage select resources of the plurality of resources of the IC **card** ; andan application-independent application interface executing **on** the computer to implement services utilized by the computer-implemented application to facilitate user access...
Basic Derwent Week: **200022**

  17/5,K/21   (Item 21 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0008754701 - Drawing available
WPI ACC NO: 1998-297347/ **199826**
Related WPI Acc No: 1997-132177; 1997-297677; 1999-045046; 1998-413579; 1997-332383
XRPX Acc No: N1998-232691
Data transfer method e.g. for hard disk integrated circuit of SCSI target device - involves transmitting first SCSI data transfer command to SCSI target device by reconnecting SCSI bus with SCSI target device after completion of transmission of second SCSI data transfer command
Patent Assignee: ADAPTEC INC (ADAP-N)
Inventor: KRAKIRIAN S H
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 5752083	A	19980512	US 1994205002	A	19940301	199826	B

Priority Applications (no., kind, date): US 1994205002 A 19940301; US
    1995463617 A 19950605

Patent Details
Number   Kind Lan   Pg Dwg Filing Notes
US 5752083   A   EN   13 Division of application US 1994205002

Alerting Abstract US A
    The method involves determining whether a first SCSI data transfer
command is an autotransfer command while transmitting the first SCSI data
transfer command from a SCSI bus to SCSI target device. If the first SCSI
data transfer command is not an autotransfer command, disconnection of SCSI
target device is carried out from the SCSI bus , without waiting for
communication from a processor of the SCSI target device. If a second SCSI
data transfer command is detected to be an autotransfer command, the
transmission of the second SCSI data transfer command is then carried out
to the SCSI target device without waiting for the communication from the
processor in the SCSI device.
    A second SCSI data transfer command is transmitted to the SCSI target
device from the SCSI bus . The SCSI target device is reconnected with the
SCSI bus for performing transmission of the first SCSI data transfer
command after completion of transmission of second SCSI data transfer
command. The received first SCSI data transfer command is deciphered in the
processor of the SCSI target device.
    ADVANTAGE - Avoids requirement of additional interrupts for disconnection
and reconnection of bus .

Title Terms/Index Terms/Additional Words: DATA; TRANSFER; METHOD; HARD;
    DISC; INTEGRATE; CIRCUIT; TARGET; DEVICE; TRANSMIT; FIRST; COMMAND;
    RECONNECT; BUS ; AFTER; COMPLETE; TRANSMISSION; SECOND

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
    G06F-0013/12 A   I   R 20060101
    G06F-0013/38 A   I   R 20060101
    G06F-0003/06 A   I   R 20060101
    G06F-0013/12 C   I   R 20060101
    G06F-0013/38 C   I   R 20060101
    G06F-0003/06 C   I   R 20060101
US Classification, Issued: 395894000, 395439000, 395739000, 360097010

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-C01A

...involves transmitting first SCSI data transfer command to SCSI target
device by reconnecting SCSI bus with SCSI target device after completion
of transmission of second SCSI data transfer command

    Alerting Abstract ...is an autotransfer command while transmitting the
first SCSI data transfer command from a SCSI bus to SCSI target device.
If the first SCSI data transfer command is not an autotransfer command,
disconnection of SCSI target device is carried out from the SCSI bus ,
without waiting for communication from a processor of the SCSI target
device. If a second...

...second SCSI data transfer command is transmitted to the SCSI target
device from the SCSI bus . The SCSI target device is reconnected with the
SCSI bus for performing transmission of the first SCSI data transfer
command after completion of transmission of...

...ADVANTAGE - Avoids requirement of additional interrupts for
disconnection and reconnection of bus .

Title Terms.../Index Terms/Additional Words: BUS ;

Original Publication Data by Authority

Original Abstracts:
...controller integrated circuit of a SCSI target-device comprises a
sequencer which causes a SCSI **bus** to transition from **a** command **bus**
phase to a **data** transfer **bus** phase during execution **of** an autoread or
an autowrite SCSI command without waiting for a communication from a
microprocessor...
Claims:
...method of transferring data to a SCSI target device comprising: (a)
receiving in the SCSI **target** device a first SCSI data transfer command
from a SCSI bus; (b) disconnecting the SCSI...

...said disconnecting a second SCSI data transfer command from the SCSI
bus; (e) determining in **a** disk controller integrated circuit of the SCSI
target device whether the second SCSI **data** transfer command is an
autotransfer command and starting **data** **transfer** for **the** **second** SCSI
data **transfer** command by the disk **controller** **integrated** circuit
without waiting for **a** **communication** from said processor in the SCSI
target device upon determining that said second SCSI data...

...command is an autotransfer command; and (f) reconnecting the SCSI target
device to the SCSI **bus** and performing the data transfer for the first
SCSI command following completion of **the** data transfer for the second
SCSI data transfer command by the disk controller integrated circuit.
Basic Derwent Week: **199826**

17/5, K/24 (Item 24 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0008129053 - Drawing available
WPI ACC NO: 1997-228840/ **199721**
XRPX Acc No: N1997-189151
Vehicle **mounted** **communications** **apparatus** **having** **IC** card reader **e.g.**
for **communication** **with** **roadside** **device** - has device for encrypting data for
transmission **to** **roadside** **device** **before** vehicle enters communication area
of device, and communication control mechanism
Patent Assignee: DENSO CORP (NPDE); NIPPONDENSO CO LTD (NPDE)
Inventor: ANDO T; MAEDA A; YOSHIDA I
Patent Family (7 patents, 5 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 769763	A2	19970423	EP 1996116816	A	19961018	199721	B
JP 9115019	A	19970502	JP 1995271219	A	19951019	199728	E
US 5926546	A	19990720	US 1996733912	A	19961018	199935	E
SG 71003	A1	20000321	SG 199610866	A	19961019	200022	E
JP 3156562	B2	20010416	JP 1995271219	A	19951019	200124	E
EP 769763	B1	20031210	EP 1996116816	A	19961018	200405	E
DE 69631010	E	20040122	DE 69631010	A	19961018	200415	E
			EP 1996116816	A	19961018		

Priority Applications (no., kind, date): JP 1995271219 A 19951019; EP
1996116816 A 19961018

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 769763	A2	EN	34	12	
Regional Designated States,Original:					DE FR GB
JP 9115019	A	JA	27		
SG 71003	A1	EN			
JP 3156562	B2	JA	27		Previously issued patent JP 09115019
EP 769763	B1	EN			
Regional Designated States,Original:					DE FR GB
DE 69631010	E	DE			Application EP 1996116816
					Based on OPI patent EP 769763

Alerting Abstract EP A2
The apparatus includes a cryptographic mechanism (14) for encrypting
transmission data to be transmitted to the roadside device (20) before the
vehicle enters the communication area of the roadside device (20). A
communication mechanism (18) performs the communications operations with
the roadside device by transmitting the encrypted transmission data to the

roadside device.

It also receives the reception data from the roadside **device** when the **vehicle** is within the communication area of the roadside **device** . The cryptographic mechanism is used for **decrypting** the reception data after the communication mechanism completes the communication operations with the roadside **device** .

USE - For performing data communication using encrypted data with roadside device positioned along vehicular road.

ADVANTAGE - Efficiently encrypts data to be transmitted, performs communication in small communication area for short period of time and prevents illegal interception of data and similar. Can also provide toll charging system.

Title Terms/Index Terms/Additional Words: **VEHICLE** ; MOUNT; COMMUNICATE; APPARATUS; IC; CARD; READ; ROAD; DEVICE; DATA; TRANSMISSION; ENTER; AREA; CONTROL; MECHANISM

Class Codes
International Classification (Main): G07B-015/00
International Classification (+ Attributes)
IPC + Level Value Position Status Version

B60R-0016/02	A	N		R	20060101
G07B-0015/00	A	I		R	20060101
B60R-0016/02	C	N		R	20060101
G07B-0015/00	C	I		R	20060101

US Classification, Issued: 380009000, 380024000

File Segment: EPI;
DWPI Class: T05; T07; W02; W06; X22
Manual Codes (EPI/S-X): T05-C03; T05-D02; T07-A03A1; W02-G05B; W06-A04B1; W06-A04B3; X22-X07

 Vehicle **mounted communications apparatus having IC** card   reader **e.g.** **for communication with roadside device...**

...has device for encrypting data for transmission to roadside device **before** vehicle **enters communication area of device, and communication control mechanism**

Original Titles:
... **Vehicle** -mounted communication device and **vehicle** monitoring system using pre-encrypted data for highly reliable communication operation...

... **Vehicle** -mounted communication device and **vehicle** monitoring system using pre-encrypted data for highly reliable communication operation...

...COMMUNICATION EQUIPMENT FOR **VEHICLE** AND TRAVELING **VEHICLE** MONITORING SYSTEM

 Alerting Abstract ...14) for encrypting transmission data to be transmitted to the roadside device (20) before the **vehicle** enters the communication area of the roadside device (20). A communication mechanism (18) performs the...

...It also receives the reception data from the roadside **device** when the **vehicle** is within the communication area of the roadside **device** . The cryptographic mechanism is used for **decrypting** the reception data after the communication mechanism completes the communication operations with the roadside **device** .

Title Terms/Index Terms/Additional Words: **VEHICLE** ;

Original Publication Data by Authority

Original Abstracts:
...is provided with transceivers (32, 34, 42, 44) in gantries (30, 40) installed along a **vehicle** road. This collection **system** uses the transceivers (32, 34, 42, 44) to perform communication with a **vehicle** -mounted **device** (10) **based** on **the** use of encrypted data. The **vehicle** -mounted **device** (10) **performs** the **encryption** and **decryption** of the **communication**   **data** before its **entry** into the **communication** area of

the **gantries** (30, 40) and after its passage therethrough. Also, writing of the data into the IC card (2), **etc**. are also performed using encrypted data. However, an algorithm which differs from that used in...

...processing is used for encrypting the communication data. As a result,since the encryption and **decryption** of the data **is** performed only in the roadside **device** (20) side during **communication** and this encryption and **decryption** can be performed **at** a high speed, the communication time can be **shortened** to perform accurate data communications within a **limited period** of time while the **vehicle** is travelling.

   ...

...toll charge from an IC card is provided with transceivers in gantries installed along a **vehicle** road. This collection system uses the transceivers to **perform** communication with a **vehicle** -mounted **device** based on the **use** of encrypted data. The **vehicle** -mounted **device** performs the encryption and **decryption** of **the communication data** before its entry into **the communication** area **of the** gantries and after its passage **therethrough**. Also, writing of the **data** into the IC card, etc. are also performed using encrypted data. However, an algorithm which...

...processing is used for encrypting the communication data. As a result, since the encryption and **decryption** of the data is performed only in the **roadside** device side **during** communication and this encryption and **decryption can** be performed at a high speed, the **communication** time can be shortened to perform accurate **data** communications within a limited period of time while **the vehicle** is travelling.
Claims:
1. A **vehicle** -mounted **communication** device (10) which is installed in a **vehicle** and **which** is for performing communication operations with a roadside device (20) installed along a road when said **vehicle** is **within** a communication area of said roadside device (20), said **vehicle** -mounted **communication** device (10) comprising:</br> cryptographic means (14) for encrypting transmission data to be transmitted to said roadside device (20) before said **vehicle** enters said communication **area** of said roadside device (20); and</br> communication means (18) for performing said communication operations with...

...roadside device (20) and by receiving reception data from said roadside device (20) when said **vehicle** is within said communication area **of** said roadside device (20...

...Eine an **einem** Fahrzeug angebrachte Kommunikationsvorrichtung (10), welche in einem Fahrzeug montiert ist und welche zum Durchfuhren von...

...A **vehicle** -mounted communication device (10) which is installed in a **vehicle** and which is for performing communication operations with a roadside device (20) installed along a road when said **vehicle** is within a communication **area** of said roadside device (20), said **vehicle** -mounted communication **device** (10) comprising:drive means (12) for receiving an IC **card** (2) that stores predetermined card data;cryptographic means (14) for encrypting transmission data to be...

...said communication means (18) in said ICcard via said drive means (12) based on said **decrypted data**, characterized in thatsaid decrypting **unit** (14) further encrypts said result of **said** communication operation before storing said result in said **IC** card (2) by using **a** card **data** encryption **algorithm**, wherein said **communication** encryption algorithm has a higher processing speed than said card **data** encryption algorithm

        Dispositif de **communication** monte sur vehicule (10) qui est installe dans un vehicule et qui est destine a...A communication device for installation in a **vehicle** to perform a communication operation with a roadside device when said communication device is within...

...device and by receiving reception data from said roadside device when said communication device is **within** said communication area of said roadside device; andcryptographic means for encrypting, using a first

encryption **algorithm**, said card data read through said drive means to generate said transmission data and for decrypting, using said first encryption algorithm, said **reception** data to obtain decrypted data, said cryptographic means further encrypting, using a second encryption **algorithm** different from said first encryption algorithm, a **result** of said **communication** operation, and storing **said result** of said **communication** operation encrypted using said second encryption algorithm in said IC card through said drive means. Basic Derwent Week: **199721**

 17/5, K/25   (Item 25 from file: 350)
DIALOG(R) File 350: Derwent WPIX
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0007081622 - Drawing available
WPI ACC NO: 1995-106500/ **199514**
XRPX Acc No: N1995-084289
Secure information retrieval from mass storage media - using decryption controller on SCSI bus **which retrieves information from mass storage device, decrypts it and passes it to host computer**
Patent Assignee: INFOSAFE SYSTEMS INC (INFO-N)
Inventor: LIPSCOMB T H; LIPSCOMBE T H; NAGEL R; NAGEL R H
Patent Family (5 patents, 58 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 5394469	A	19950228	US 1994198733	A	19940218	199514	B
WO 1995022796	A1	19950824	WO 1995US2072	A	19950209	199539	E
AU 199519236	A	19950904	AU 199519236	A	19950209	199549	E
WO 1996024893	A1	19960815	WO 1995US1531	A	19950206	199638	NCE
AU 199518392	A	19960827	AU 199518392	A	19950206	199649	NCE
			WO 1995US1531	A	19950206		

Priority Applications (no., kind, date): US 1994198733 A 19940218; WO 1995US1531 A 19950206; AU 199518392   A 19950206
Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5394469	A	EN	11	7	
WO 1995022796	A1	EN	27	7	

National Designated States, Original: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN
Regional Designated States, Original: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG

AU 199519236	A	EN			Based on OPI patent WO 1995022796
WO 1996024893	A1	EN	35	6	

National Designated States, Original: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN
Regional Designated States, Original: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE

AU 199518392	A	EN			PCT Application WO 1995US1531
					Based on OPI patent WO 1996024893

  Alerting Abstract US A
   The appts. for retrieving information packets from a mass storage device, at least some of which are encrypted, has a digital **bus** that transmits address information, control information and data from a call initiating unit to one or more receivers. Each unit connected to the **bus** has an associated **bus** address. A host computer has a first address, a mass storage device a second and a decryption controller a third. The decryption controller has a control unit, a memory and a decryption unit.
   The host computer stores the third address as the mass storage **device** address and sends information requests to the decryption controller in lieu of the mass storage **device**. The **decryption** controller receives the requests and sends information requests to the mass storage **device**, stores the packets received from the mass storage device, **decrypts** encrypted portions as required and transmits the information packets, in **decrypted** form to the host computer.
   USE/ADVANTAGE - Not susceptible to attack or compromise by user. Does not require reconfiguration of PC at user side.

Title Terms/Index Terms/Additional Words: SECURE; INFORMATION; RETRIEVAL;

MASS; STORAGE; MEDIUM; DECRYPTER; CONTROL; **BUS** ; DEVICE; PASS; HOST; COMPUTER

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
```
G06F-0001/00   A  I      R  20060101
G06F-0001/00   A  N      R  20060101
G06F-0012/14   A  N      R  20060101
G06F-0021/00   A  I      R  20060101
G06F-0001/00   C  I      R  20060101
G06F-0001/00   C  N      R  20060101
G06F-0012/14   C  N      R  20060101
G06F-0021/00   C  I      R  20060101
```
US Classification, Issued: 380004000, 380009000, 380023000, 380025000,
380029000, 380049000, 380050000

File Segment: EPI;
DWPI Class: T01; W01
Manual Codes (EPI/S-X): T01-C07C; T01-J05B; W01-A05A; W01-A06B1; W01-A06E1

...using decryption controller on SCSI bus **which retrieves information from mass storage device, decrypts it and passes it to host computer**

Alerting Abstract ...from a mass storage device, at least some of which are encrypted, has a digital **bus** that transmits address information, control information and data from a call initiating unit to one or more receivers. Each unit connected to the **bus** has an associated **bus** address. A host computer has a first address, a mass storage device a second and...

... The host computer stores the third address as the mass storage **device** address and sends information requests to the decryption controller in lieu of the mass storage **device** . The **decryption** controller receives the requests and sends information requests to the mass storage **device** , stores the packets received from the mass storage device, **decrypts** encrypted portions as required and transmits the information packets, in **decrypted** form, to the host computer

Title Terms.../Index Terms/Additional Words: **BUS** ;

Original Publication Data by Authority

Original Abstracts:
...personal computer or "host computer" and a Mass storage device are arranged on an SCSI **bus** . A "decryption controller", **in** a separate enclosure outside of the host computer, is also arranged on the SCSI **bus** . This controller is **addressable** by the host computer as if it were the mass storage device. Upon receipt of...
...A personal computer or "host computer" and a CD-ROM **reader** are arranged on an SCSI **bus** . A "decryption **controller** ", in a separate enclosure outside **of** the host computer, is also arranged on the SCSI **bus** . This controller is addressable by the host computer **as** if it were the CD -ROM **reader** . Upon receipt of an information request, **the** decryption **controller** initiates a request to the CD -ROM **reader** for the desired information, retrieves this **information** , decrypts **it** (if it is encrypted) and then passes it to the host computer. The decryption controller...
Claims:
...said mass storage device in encrypted form, said apparatus comprising, in combination: (a) a digital **bus** that **transmits** address information, control information and data from a call initiating unit, connected to said **bus** , to **one** or more call receiving units, connected to said **bus** , wherein **each** unit connected to said **bus** has **an** associated **bus** address; (**b**) a host computer connected to said **bus** and **having** a first address; (c) a mass storage device connected to said **bus** and **having** a second address; and (d) a **decryption** controller connected to said bus and having a third address, said decryption controller including: (1...

...said mass storage device and sends information requests via said bus to said decryption controller **in** lieu of said mass storage device; and

wherein said **decryption** controller **by** means of said control **unit** receives **information** requests from said host computer and executes said information requests by sending information requests via...

...storage device, storing in said memory information packets received from said mass storage device in **response** to said information requests, **decrypting** encrypted **portions** of said information packets, if **any**, by said **decryption** means and **transmitting** said **information packets**, in **decrypted** form, to said host computer. Basic Derwent Week: **199514**

17/5,K/27 (Item 27 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0004679143
WPI ACC NO: 1989-039500/ **198905**
Encryption device for securing stored or transmitted data - scrambles information by key read into DC board from card reader **without being seen by host computer**
Patent Assignee: MIU AUTOMATION (MIUA-N); MIU IND LTD (MIUI-N)
Inventor: DYKE J; DYKES J
Patent Family (2 patents, 1 countries)

Patent			Application				
Number	Kind	Date	Number	Kind	Date	Update	
US 4797928	A	19890110	US 19871206	A	19870107	198905	B
US RE35403	E	19961217	US 19871206	A	19870107	199705	E
			US 1990539927	A	19900618		
			US 1992837594	A	19920220		
			US 1994183771	A	19940121		

Priority Applications (no., kind, date): US 1994183771 A 19940121; US 1992837594 A 19920220; US 1990539927 A 19900618; US 19871206 A 19870107

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 4797928	A	EN	12	3	
US RE35403	E	EN	12	3	Original reissued application US 19871206
					Continuation of application US 1990539927
					Continuation of application US 1992837594
					Reissue of patent US 4797928

Alerting Abstract US A
The **device** includes a printed **circuit** board having a computer connected to a ciphering **processor**. The ciphering **processor** encrypts and **decrypts** data using the National Bureau of Standards encryption algorithm. The printed **circuit** board is connected to a host computer for **receiving** blocks of clear or encrypted **data** and commands for automatically starting the ciphering process.
  The encryption PC board scrambles the information by a key. The key is read into the PC board from a **card reader** whenever data is to be encrypted or decrypted, the data decrypted or encrypted as directed, and returned to the host processor. Thus, the host computer never sees the key that was used. A secondary key is used to prevent file linking together different files in storage.
  USE/ADVANTAGE - E.g. for data processing systems, telecommunication networks, magnetic tape and disk. Low cost, high performance, secure and versatile.

Title Terms/Index Terms/Additional Words: ENCRYPTION; DEVICE; SECURE; STORAGE; TRANSMIT; DATA; SCRAMBLE; INFORMATION; KEY; READ; DC; BOARD; CARD; HOST; COMPUTER; DATA; PROCESSOR; TELECOMMUNICATION; MAGNETIC; TAPE; DISC

Class Codes
International Classification (Main): H04L-009/00
  (Additional/Secondary): H04K-001/00
US Classification, Issued: 380049000, 380004000, 380021000, 380023000,

380025000, 380029000, 380044000

File Segment: EPI;
DWPI Class: T01; T03; W01
Manual Codes (EPI/S-X): T01-H01C; T03-P01; W01-A05

...scrambles information by key read into DC board from card reader **without being seen by host computer**

Alerting Abstract ...The **device** includes a printed **circuit** board having a computer connected to a ciphering **processor** . The ciphering **processor** encrypts and **decrypts** data using the National Bureau of Standards encryption algorithm. The printed **circuit** board is connected to a host computer for **receiving** blocks of clear or encrypted **data** and commands for automatically starting the ciphering process...

...the information by a key. The key is read into the PC board from a **card reader** whenever data is to be encrypted or decrypted, the data decrypted or encrypted as directed...

Original Publication Data by Authority

Original Abstracts:
...for connection to the host computer. The addresses registers are connected to a memory decode, **auto** -start PROM, I/O decoder and register select. The memory decoder is connected to the **auto** -start PROM and **the** I/O decoder is connected to the register select. A **bus** logic circuit is **connected** to the read/write controller, and outputs read/write signals to the data information transceiver and register select. The data information transceiver is connected to the **auto** -start PROM and **to** a plurality of data registers for receiving instructions from the **auto** -start PROM and **inputting** or receiving information from the data registers pursuant to instruction of the **auto** -start PROM program, **and** selection of the appropriate registers by the register select. A cipher processor, microprocessor, low address...

...program, and buffer are connected to the data registers. The microprocessor is connected to a **card reader** through a **card reader** interface, and **to an** upper address decoder and the memory, program, buffer. Upon receipt of a load key instruction...
Claims:
...a cipher **processor** connected to the register means for receiving data for encryption or **decryption** selectively...

...a key **card** interface means connected to the microprocessor, the key **card** interface means for connection to a key **card reader** for obtaining key information for the cipher processor...

 17/5,K/28   (Item 28 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0003063036
WPI ACC NO: 1984-153978/ **198425**
 Auto -teller using encryption module for user card data - has removable loader containing algorithm performance instructions on ROM for generating master key for encryption circuit
Patent Assignee: BURROUGHS CORP (BURS)
Inventor: ABRAHAM P C T; FERNANDES A M C
Patent Family (5 patents, 8 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 111381	A	19840620	EP 1983304907	A	19830825	198425	B
GB 2131586	A	19840620	GB 198234568	A	19821203	198425	E
GB 2131586	B	19851120	GB 198234568	A	19821203	198547	E
EP 111381	B	19881102	EP 1983304907	A	19830825	198844	E
DE 3378383	G	19881208				198850	E

Priority Applications (no., kind, date): GB 198234568   A 19821203

Patent Details
Number   Kind Lan   Pg   Dwg   Filing Notes
EP 111381   A   EN   80   9
Regional Designated States,Original: BE CH DE FR LI NL SE
EP 111381   B   EN
Regional Designated States,Original: BE CH DE FR LI NL SE

   Alerting Abstract EP A
   The autoteller system encryption module is coupled to receive an input
word and current key word. The module responds to the latter to provide an
output word. A removable master key loader provides instructions for the
operation of an algorithm to generate a master key word. A port on the
encryption module receives the master key loader and also reads the instant
instructions from it.
   A **card**   **reader** reads the data from the user **card** . A data link
receives a sub-key word from a remote location host system. The teller
system generates a session key word by coupling the sub-key word as an
input word in the encryption module. The system has the keys stored in a
battery maintained RAM which is volatile if the encryption module is
removed.

Title Terms/Index Terms/Additional Words: **AUTO** ; TELLER; ENCRYPTION;
   MODULE; USER; CARD; DATA; REMOVE; LOAD; CONTAIN; ALGORITHM; PERFORMANCE;
   INSTRUCTION; ROM; GENERATE; MASTER; KEY; CIRCUIT
Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
   G06Q-0040/00   A   I   L   R   20060101
   G07D-0009/00   A   I   F   R   20060101
   G07F-0007/10   A   I   R   20060101
   G06Q-0040/00   C   I   L   R   20060101
   G07D-0009/00   C   I   F   R   20060101
   G07F-0007/10   C   I   R   20060101

File Segment: EPI;
DWPI Class: T05
Manual Codes (EPI/S-X): T05-H02; T05-K02; T05-L

 Auto -**teller using encryption module for user card data**...

   Alerting Abstract ...A **card**   **reader** reads the data from the user **card**
. A data link receives a sub-key word from a remote location host system.
The...

Title Terms/Index Terms/Additional Words: **AUTO** ;

Original Publication Data by Authority

Original Abstracts:
 Improvements in and relating to autoteller systems.   An autoteller system
10 comprises an encryption **module** 30 for encrypting and decrypting data
on user **cards** and for encrypting and **decrypting**   **data**   **communicated**
between it 10 and a remote host 22. The system is characterised by a key
loader 58 containing algorithm performance instructions on a ROM 88
removably connectable to the encryption module...
Claims:
...A **card**   **reader** reads the data from the user **card** . A data link
receives a sub-key word from a remote location host system. The...

...A system including an autoteller (10) for dispensing money on
presentation of a valid **card** ; said autoteller including a **card**   **reader**
(24) for reading data from a **card** ; a data link (20) for communicating
with a remote processor (22); an encryption module (30...

...a master key word, a port on said encryption module for receiving said
master key **loader** and for reading said instructions therefrom, a **card**
reader for reading data from said **card** , and a data link operable to
receive a remotely provided sub key word, where said...

...word in said encryption module, said system being coupled to receive
said data on said **card** from said **reader** and being operable thereafter

to coupled said data from said **card** to said encryption module as said input word to said encryption module for encryption in...

...a selected one out of a plurality of manners of encryption; a removable master key **loader** for providing instructions for the performance of an algorithm for the generation of a master key word, a port on said encryption module for receiving said master key **loader** and for reading said instructions therefrom, a **card** **reader** for reading data from said **card**, and a data link operable to receive a remotely provided sub key word, where said...

...word in said encryption module, said system being coupled to receive said data on said **card** from said **reader** and being operable thereafter to coupled said data from said **card** to said encryption module as said input word to said encryption module for encryption in...
...

23/5,K/3   (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
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05500219   **Image available**
COMMUNICATION EQUIPMENT FOR VEHICLE AND TRAVELING VEHICLE MONITORING SYSTEM

PUB. NO.:   09-115019 [JP 9115019 A]
PUBLISHED: May 02, 1997 (**19970502)**
INVENTOR(s):   MAEDA ASAKO
                ANDO TOSHIHIDE
                YOSHIDA ICHIRO
APPLICANT(s):   DENSO CORP [000426] (A Japanese Company or Corporation), JP
                (Japan)
APPL. NO.:   07-271219 [JP 95271219]
FILED: October 19, 1995 (19951019)
INTL CLASS: [6] G07B-015/00
JAPIO CLASS: 29.4 (PRECISION INSTRUMENTS -- Business Machines)
JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers &
                Microprocessers)

ABSTRACT
PROBLEM TO BE SOLVED: To shorten the communication time by efficiently
ciphering data at communication equipment for vehicle for exchanging
ciphered data with on-road equipment.

SOLUTION: In this system in which communication equipment 32, 42... are
provided at guntries 30 and 40 installed on a **vehicle** traveling road,
communication using the ciphered data is performed with on-vehicle
equipment 10 through the communication equipment 32, 42... and a passage
fee is automatically collected from an **IC card** 2, an on-**vehicle**
equipment 10 ciphers and **deciphers** the **communication** data before
entering the guntries 30 and 40 and after passage. Besides, the ciphered
data are also used for writing data into the IC **card** 2 but a high-speed
processable algorithm different from the IC **card** 2 is used for ciphering
the **communication** **data**. As a result, since it is enough to
cipher/decipher the data only on the side of on-road equipment 20 at the
time of communication and this operation can be performed at a high speed,
the communication time can be shortened and data communication can exactly
be executed within limited time during traveling.

23/5,K/7   (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0015870409 - Drawing available
WPI ACC NO: 2006-402085/200641
Related WPI Acc No: 2004-460159; 2007-089100
XRPX Acc No: N2006-335170
Cryptographic serial advanced technology attachment device for internal
attachment of hard disk drive in personal computer, has high-speed
cryptographic processing engine connected to main controller
Patent Assignee: CHIU C (CHIU-I); ENOVA TECHNOLOGY CORP (ENOV-N); WANN S
  (WANN-I); ENOVA SCI & TECHNOLOGY CO LTD (ENOV-N)
Inventor: CHIU C; WANN S; CHIU C Y; QIU Z; WAN S
Patent Family (3 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20060117189	A1	20060601	US 2000704769	A	20001103	200641	B
			US 2003635833	A	20030806		
			US 2005282175	A	20051118		
JP 2007143149	A	20070607	JP 2006306383	A	20061113	200738	E
CN 101008931	A	20070801	CN 200610162479	A	20061117	200808	E

Priority Applications (no., kind, date): US 2000704769 A 20001103; US
  2003635833 A 20030806; US 2005282175 A 20051118

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes

Alerting Abstract US A1

NOVELTY - The cryptographic serial advanced technology attachment (SATA) device comprises main controller, SATA device and host protocol stacks. A cryptographic engine is connected between main controller and SATA device and host protocol stacks, for high-speed cryptographic processing. The engine performs encryption/decryption on predefined frame information structures (FISs) payload exchanged between SATA host adapter and SATA device controller.

DESCRIPTION - An INDEPENDENT CLAIM is also included for cryptographic method.

USE - For internal attachment of storage devices e.g. internal/external hard **disk** drive (HDD), compact **disk** (**CD**), **DVD** , and Flash memory enclosures, serial ATA-to-integrated drive electronics (IDE)/IDE-to-serial ATA module, SATA-to-universal serial **bus** (USB)/USB-to-SATA module in e.g. personal computer (PC).

ADVANTAGE - The cryptographic SATA **device** encrypts/ **decrypts** selected **data** streams received at each input/output side of host/ **device** at high speed and distinguishes a **received** FIS with a **data** payload that requires cryptographic processing from all others that do not require cryptographic processing, efficiently and quickly.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the cryptographic SATA device.

Title Terms/Index Terms/Additional Words: CRYPTOGRAPHIC; SERIAL; ADVANCE; TECHNOLOGY; ATTACH; DEVICE; INTERNAL; HARD; DISC; DRIVE; PERSON; COMPUTER ; HIGH; SPEED; PROCESS; ENGINE; CONNECT; MAIN; CONTROL

Class Codes
International Classification (+ Attributes)

IPC +	Level	Value	Position		Status	Version
G06F-0012/14	A	I	F	B	20060101
H04L-0009/10	A	I	F	B	20060101
G06F-0013/38	A	I	F		20060101
G06F-0013/42	A	I	L		20060101
H04L-0029/08	A	I	L		20060101
G06F-0012/14	C	I	L	B	20060101
H04L-0009/10	C	I	F	B	20060101
G06F-0013/38	C	I			20060101
G06F-0013/42	C	I			20060101
H04L-0029/08	C	I			20060101

US Classification, Issued: 713189000

File Segment: EPI;
DWPI Class: T01; T03
Manual Codes (EPI/S-X): T01-C01; T01-C07C4; T01-D01; T01-H01B; T01-H05B2; T03-A08A1C; T03-P01F; T03-P07A

Alerting Abstract ...USE - For internal attachment of storage devices e.g. internal/external hard **disk** drive (HDD), compact **disk** (**CD**), **DVD** , and Flash memory enclosures, serial ATA-to-integrated drive electronics (IDE)/IDE-to-serial ATA module, SATA-to-universal serial **bus** (USB)/USB-to-SATA module in e.g. personal computer (PC...

...ADVANTAGE - The cryptographic SATA **device** encrypts/ **decrypts** selected **data** streams received at each input/output side of host/ **device** at high speed and distinguishes a **received** FIS with a **data** payload that requires cryptographic processing from all others that do not require cryptographic processing, efficiently...

Original Publication Data by Authority

Claims:
An encrypting/ **decrypting** **device** is comprised of a main controller, at least one protocol stack which is suitable for difference of the **signal transmission** and at least one encryptor/decryptor which is coupled between the main controller and protocol...

Basic Derwent Week: 200641

0015737249 - Drawing available
WPI ACC NO: 2006-298767/200631
Related WPI Acc No: 2004-225351
XRPX Acc No: N2006-253704
Digital right management card in personal computer, has interface sending digital document portion to digital appliance in presentation equivalent format, such that digital appliance access document only in presentation equivalent format
Patent Assignee: ELAZAR G (ELAZ-I); HARKABI D (HARK-I); WEINGARTEN N (WEIN-I); SANDISK CORP (SAND-N)
Inventor: ELAZAR G; HARKABI D; WEINGARTEN N
Patent Family (2 patents, 111 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20060080535	A1	20060413	US 2002227155	A	20020823	200631	B
			US 200567298	A	20050225		
WO 2006110213	A2	20061019	WO 2006US5687	A	20060215	200669	E

Priority Applications (no., kind, date): US 2002227155 A 20020823; US 200567298 A 20050225

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20060080535	A1	EN	13	6	C-I-P of application US 2002227155
WO 2006110213	A2	EN			

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
Regional Designated States,Original: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

Alerting Abstract US A1
NOVELTY - The device has a formatter for rendering stored form of digital document into a presentation equivalent format for a digital appliance. An interface is provided for sending a portion of the digital document to the digital appliance in the presentation equivalent format, such that the digital appliance access the digital document only in the presentation equivalent format.
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
1. method of supplying digital document to digital appliance; and

2. system for digital content management.

USE - E.g. flash memory **card** such as **compact flash **, **multi- **media** card **, **secured digital **, **mini secured digital ** , **transflash **, **memory stick **, **flash drives e . g** . universal serial bus (USB) flash drive used in digital appliance such as personal computer (PC), tablet computer, personal digital assistant (PDA), cell phone and handheld device.
ADVANTAGE - Since the digital appliance cannot access the stored information content of the digital document in the device, the security of the digital document is increased.
DESCRIPTION OF DRAWINGS - The figure shows a schematic block diagram of the digital right management device.

Title Terms/Index Terms/Additional Words: DIGITAL; RIGHT; MANAGEMENT; CARD; PERSON; COMPUTER; INTERFACE; SEND; DOCUMENT; PORTION; APPLIANCE; PRESENT; EQUIVALENT; FORMAT; ACCESS

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
  G06F-0021/00 A I F B 20060101
  G06F-0021/00 A I   R 20060101

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G06F-0021/24   A  I   F  R   20060101
G06Q-0050/00   A  I   L  R   20060101
H04L-0009/00   A  I   F  B   20060101
H04L-0009/10   A  I   L  R   20060101
H04L-0009/16   A  I   L  R   20060101
H04L-0009/32   A  I   L  R   20060101
G06F-0021/00   C  I   F  B   20060101
G06F-0021/00   C  I      R   20060101
G06Q-0050/00   C  I   L  R   20060101
H04L-0009/00   C  I   L  B   20060101
H04L-0009/10   C  I   L  R   20060101
H04L-0009/14   C  I   L  R   20060101
H04L-0009/32   C  I   L  R   20060101
```
US Classification, Issued: 713176000

File Segment: EPI;
DWPI Class: T01; T04
Manual Codes (EPI/S-X): T01-F05E; T01-H01B3D; T01-H01C2; T01-J11D; T01-J11E
  ; T04-K02A; T04-K03D

   Alerting Abstract ...USE - E.g. flash memory **card** such as compact
flash , multi-**media** card , secured digital ,
minisecured digital **** , **transflash** , memory stick ,
flash drives e.g. universal serial bus (USB) flash drive used in
digital appliance such as personal computer (PC...

Original Publication Data by Authority

Original Abstracts:
...document file can be resident already on a device, and/or be transferred
into a **device** that is connected to the digital appliance. The **device**
(hereafter a DRM **device**) can internally store the digital document or
part of the document. The DRM **device** may **decrypt** the digital document
when requested to do so. The **device** may further format the content for
usage, for example, convert text into its graphic bitmap representation.
Device formatting can include **sending** plain text **data** to the digital
appliance. The device may further process degradation to the resulted file,
for...

...document file can be resident already on a device, and/or be transferred
into a **device** that is connected to the digital appliance. The **device**
(hereafter a DRM **device**) can internally store the digital document or
part of the document. The DRM **device** may **decrypt** the digital document
when requested to do so. The **device** may further format the content for
usage, for example, convert text into its graphic bitmap representation.
Device formatting can include **sending** plain text **data** to the digital
appliance. The device may further process degradation to the resulted file,
for...
Basic Derwent Week: 200631

   23/5,K/9   **(Item 4 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
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0015065504
WPI ACC NO: 2005-414736/200542
XRPX Acc No: N2005-336139
An apparatus and a method for secure communications for network computers
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: BREWER J A; GUPTA S
Patent Family (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
TW 589521	A	20040601	TW 2001107299	A	20010328	200542	B
US 6922785	B1	20050726	US 2000569499	A	20000511	200549	E

Priority Applications (no., kind, date): US 2000569499 A 20000511

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes

NOVELTY - An apparatus and a method in a distributed data processing system are provided for encrypting all data being sent from a computer to a network by using encryption hardware built on a network interface card. A block of data is retrieved from segmentation logic on a network interface card, encrypted using encryption hardware, and then inserted into a data packet. A flag is set in a packet header to indicated the type of encryption before the packet is transmitted to the network. When the packet is received at a data processing system equipped in a similar manner as the sending data processing system, the decryption algorithm indicated by the flag in the packet header is applied to the data using decryption hardware built on the network interface **card**. The **decrypted data** is then sent to re-assembly **logic** for rebuilding the original message from the **transmitted** packets. Once the message is rebuilt, it is sent to a computer memory via a system **bus** for further processing. If the **receiving data** processing system is not equipped with a similar network interface **card**, it is still possible to decrypt the message if suitable software is provided.

Title Terms/Index Terms/Additional Words: APPARATUS; METHOD; SECURE; COMMUNICATE; NETWORK; COMPUTER

Class Codes
International Classification (Main): G06F-001/00
International Classification (+ Attributes)
IPC + Level Value Position Status Version
  H04L-0029/06 A I   R 20060101
  H04L-0009/06 A I   R 20060101
  H04L-0009/30 A I   R 20060101
  H04L-0029/06 C I   R 20060101
  H04L-0009/06 C I   R 20060101
  H04L-0009/28 C I   R 20060101
US Classification, Issued: 713201000, 713176000, 713202000, 380028000, 380021000, 380047000, 340825070, 340824000

File Segment: EPI;
DWPI Class: T01; W01
Manual Codes (EPI/S-X): T01-D01; W01-A05A

...packet header is applied to the data using decryption hardware built on the network interface **card**. The **decrypted data** is then sent to re-assembly **logic** for rebuilding the original message from the **transmitted** packets. Once the message is rebuilt, it is sent to a computer memory via a system **bus** for further processing. If the **receiving data** processing system is not equipped with a similar network interface **card**, it is still possible to decrypt the message if suitable software is provided.

Original Publication Data by Authority

Original Abstracts:
...type. If the data packet is received by a system equipped with similar network interface **card**, decryption algorithm indicated by the flag is applied to the data using decryption hardware on...

...is sent to a computer memory via a system bus for further processing. If the **data** packet is received by a system not equipped with the network interface card, suitable **software** is **provided** to **decrypt** the **data packet**. > Basic Derwent Week: 200542

 23/5,K/12   **(Item 7 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0013987032 - Drawing available
WPI ACC NO: 2004-168079/200416
XRPX Acc No: N2004-134053
Vehicle e.g. car-onboard dedicated short-range communication apparatus for

electronic toll collection system, has command control unit to manage command according to result of judgment by command judgment unit

Patent Assignee: MATSUSHITA ELECTRIC CORP AMERICA (MATU); MITSUBISHI DENKI KK (MITQ); MIYAMOTO T (MIYA-I); RENESAS TECHNOLOGY CORP (RENE-N); RUNESASU TECHNOLOGY KK (RUNE-N)

Inventor: MIYAMOTO T

Patent Family (5 patents, 4 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20040019412	A1	20040129	US 2002330091	A	20021230	200416	B
DE 10315782	A1	20040226	DE 10315782	A	20030407	200416	E
JP 2004062468	A	20040226	JP 2002218975	A	20020726	200416	E
CN 1471013	A	20040128	CN 2003110210	A	20030404	200426	E
US 6920379	B2	20050719	US 2002330091	A	20021230	200547	E

Priority Applications (no., kind, date): JP 2002218975 A 20020726; US 2002330091 A 20021230

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040019412	A1	EN	25	15	
JP 2004062468	A	JA	23		

Alerting Abstract US A1

NOVELTY - The apparatus has a command judgment unit of an electronic toll collection-security application module (ETC-SAM) (24) to judge a type command included in a communication signal transmitted between a host(23) and an integrated circuit (IC) card (31) with user information. A command control unit of the ETC-SAM controls the command according to a result of judgment by the unit.

USE - Used for mounting on a vehicle e.g. car for control of an electronic toll collection system.

ADVANTAGE - The command control unit of the electronic toll collection-security application module (ETC-SAM) controls the command according to the result of the judgement unit, thereby simplifying the communication procedure and reducing the communication time, while realizing the support for multiple applications.

DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of a vehicle-onboard dedicated short range communication (DSRC) apparatus.

23 HOST
24 Electronic toll communication-security application module
25 Human-machine interface
27 Integrated circuit slot
31 Integrated circuit card

Title Terms/Index Terms/Additional Words: VEHICLE; CAR; DEDICATE; SHORT; RANGE; COMMUNICATE; APPARATUS; ELECTRONIC; TOLL; COLLECT; SYSTEM; COMMAND; CONTROL; UNIT; MANAGE; ACCORD; RESULT

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version
  G07B-0015/00 A I   R 20060101
  G08G-0001/017 A I   L R 20060101
  G08G-0001/09 A I   L R 20060101
  G07B-0015/00 C I   R 20060101
  G08G-0001/017 C I   L R 20060101
  G08G-0001/09 C I   L R 20060101

US Classification, Issued: 701001000, 340928000, 701001000, 340005600

File Segment: EPI;
DWPI Class: T01; T04; T05; W02; X22
Manual Codes (EPI/S-X): T01-H01B3A; T04-K02; T05-D02; T05-H02C5C; W02-C02G7; W02-G05B; X22-X07

Original Publication Data by Authority

Original Abstracts:

...In a **vehicle**-onboard dedicated short-range communication (DSRC) apparatus for **the** DSRC communication system, a command judgment unit of an electronic toll communication-security application module...

...type of command included in a communication signal transmitted between a HOST and an IC **card** with user information held therein. A command control **unit** of the ETC-SAM controls whether the command is to be analyzed, according to a...

...In a **vehicle**-onboard dedicated short-range communication (DSRC) apparatus for the DSRC communication system, a **command** judgment unit of an electronic toll communication-security application module (ETC-SAM) judges the type of command included in a communication signal transmitted between a HOST and an IC **card** with user information held therein. A command control unit of the ETC-SAM **controls** whether the command is to be analyzed, according to a result of judgment by the...

Claims:
...command and ETC data included in the radio communication signal communicated with the DSRC processing **unit**; anda security module includinga security processing unit including an encryption/decryption unit for...

...unit and the IC card,wherein the security processing unit further includes:a command judgment **unit** **for** judging a type of command **included** in a communication signal transmitted between **the** ETC processing **unit** and **the** **IC** card, and **a** command control **unit** for controlling whether the command is to be analyzed, according to **a** result of judgment by the command judgment unit...

... 1. A **vehicle**-onboard dedicated short-range communication (DSRC) apparatus comprising:a DSRC processing unit that processes a radio communication signal transmitted by **DSRC**;an electronic toll collection (ETC) processing unit that performs transactions of an ETC command and ETC data included in the radio communication signal communicated with the **DSRC** processing unit; anda security module includinga security processing unit including an encryption/decryption...

...by the command judgment unitswherein the command judgment unit judges whether the command included **in** the communication signal transmitted between the ETC processing unit and the IC card is an ETC command; **and** the command control unit **transmits** an execution command obtained by analyzing the ETC command to the IC card when theBasic Derwent Week: 200416

23/5,K/17   (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0012669651 - Drawing available
WPI ACC NO: 2002-519727/ **200255**
Related WPI Acc No: 2002-528016; 2003-246836; 2003-255386; 2003-800931; 2008-A45838
XRPX Acc No: N2002-411368
Computer program for playback of encrypted content in portable device , **includes codes to** decrypt **encrypted audio or video content from memory card and playback** content **in response to** received **command**
Patent Assignee: SANDISK CORP (SAND-N)
Inventor: CHANG R C; QAWAMI B; SABET-SHARGHI F
Patent Family (12 patents, 96 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2002047080	A2	20020613	WO 2001US46661	A	20011106	200255	B
AU 200232494	A	20020618	AU 200232494	A	20011106	200262	E
KR 2003060981	A	20030716	KR 2003707607	A	20030605	200381	E
TW 544579	A	20030801	TW 2001130438	A	20011207	200411	E
TW 558903	A	20031021	TW 2001130439	A	20011207	200424	E
KR 2004055724	A	20040626	KR 2003707604	A	20030605	200470	E
CN 1541391	A	20041027	CN 2001821449	A	20011206	200512	E
JP 2005506589	W	20050303	WO 2001US46661	A	20011106	200517	E
			JP 2002548721	A	20011106		
EP 1512147	A2	20050309	EP 2001992016	A	20011106	200518	E
			WO 2001US46661	A	20011106		
EP 1585127	A2	20051012	EP 2001992016	A	20011106	200567	E
			EP 200576389	A	20011106		
AU 2002232494	A8	20051110	AU 2002232494	A	20011106	200634	E

CN 1720578   A   20060111 CN 2001822009   A 20011106 200639   E

Priority Applications (no., kind, date): US 2000251731 P 20001207

Patent Details
Number   Kind Lan Pg Dwg Filing Notes
WO 2002047080 A2   EN   60   10
National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY
    BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID
    IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ
    NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA
    ZW
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH
    GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
AU 200232494   A   EN   Based on OPI patent   WO 2002047080
TW 544579   A   ZH
TW 558903   A   ZH
JP 2005506589 W   JA   95   PCT Application WO 2001US46661
                                  Based on OPI patent   WO 2002047080
EP 1512147   A2   EN   PCT Application WO 2001US46661
                                  Based on OPI patent   WO 2002047080
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE
    IT LI LU MC NL PT SE TR
EP 1585127   A2   EN   Division of application EP 2001992016

                                  Division of patent EP 1512147
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE
    IT LI LU MC NL PT SE TR
AU 2002232494 A8   EN   Based on OPI patent   WO 2002047080

Alerting Abstract WO A2
NOVELTY - The program decrypts the encrypted audio or video content from
a memory card and for playing back the content, in response to command from
a user. The program copies location information of the encrypted content
and encrypted audio/video content in a memory of a portable device.
DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

1. Portable device;

2. Stored audio or video content playing method;

3. System for enabling portable device to access encrypted music; and

4. Encrypted data accessing method.

USE - For use in portable devices such as personal computers, portable
audio players, cell phones, portable organizers, portable **car** stereos for
playing back encrypted content from memory **cards** or **CDs** .
ADVANTAGE - The program utilizes and requires only a small buffer for
encryption purposes and is designed to run efficiently even in environments
with limited processing power and memory. Enables an original equipment
manufacturers to access encrypted content without requiring knowledge of
the memory structure of the storage media.
DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the
computer program.

Title Terms/Index Terms/Additional Words: COMPUTER; PROGRAM; PLAYBACK;
    ENCRYPTION; CONTENT; PORTABLE; DEVICE; CODE; AUDIO; VIDEO; MEMORY; CARD;
    RESPOND; RECEIVE; COMMAND

Class Codes
International Classification (Main): G06F-012/14, G06F-013/00, G11B-020/00,
    G11B-020/10, H04N-007/167
 (Additional/Secondary): G06F-001/00, G06F-009/44, G11B-027/30, G06K-017/00
 , G09C-001/00
International Classification (+ Attributes)
IPC + Level Value Position Status Version
    G06F-0012/14   A I F R 20060101
    G06F-0021/00   A I   R 20060101
    G06K-0017/00   A I L R 20060101
    G09C-0001/00   A I L R 20060101
    G10L-0019/00   A I L R 20060101

```
G11B-0020/00  A  I    F  B  20060101
G11B-0020/00  A  I       R  20060101
G11B-0020/10  A  I    L  R  20060101
G11B-0020/12  A  I       R  20060101
H04L-0009/08  A  I       R  20060101
H04L-0009/10  A  I    L  R  20060101
H04N-0005/907  A  I   L  R  20060101
G06F-0012/14  C  I    F  R  20060101
G06F-0021/00  C  I       R  20060101
G06K-0017/00  C  I    L  R  20060101
G09C-0001/00  C  I    L  R  20060101
G10L-0019/00  C  I    L  R  20060101
G11B-0020/00  C  I    L  B  20060101
G11B-0020/00  C  I       R  20060101
G11B-0020/10  C  I    L  R  20060101
G11B-0020/12  C  I       R  20060101
H04L-0009/08  C  I       R  20060101
H04L-0009/10  C  I    L  R  20060101
H04N-0005/907  C  I   L  R  20060101
```

File Segment: EngPI; EPI;
DWPI Class: T01; T03; W04; P85
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-H01C2; T01-M06A1; T01-S02;
   T03-P07; W04-G01L; W04-K08; W04-K10

Computer program for playback of encrypted content in portable device **,
includes codes to** decrypt **encrypted audio or video** content from memory
card and playback content **in response to** received **command**

   Alerting Abstract ...in portable devices such as personal computers,
portable audio players, cell phones, portable organizers, portable **car**
stereos for playing back encrypted content from memory **cards** or **CDs** .

Original Publication Data by Authority

Original Abstracts:
...for original equipment manufacturers to run in electronic devices in
order to access and dynamically **decrypt** encrypted audio video or other
content from a memory storage **device** such as a memory card, optical or
hard disk such that the user interface of the **device** need only **send**
simple commands and the **decrypted** **content** is output...

...for original equipment manufacturers to run in electronic devices in
order to access and dynamically **decrypt** encrypted audio video or other
content from a memory storage **device** such as a memory card, optical or
hard disk such that the user interface of the **device** need only **send**
simple commands and the **decrypted** **content** is output...

...for original equipment manufacturers to run in electronic devices in
order to access and dynamically **decrypt** encrypted audio video or other
content from a memory storage **device** such as a memory card, optical or
hard disk such that the user interface of the **device** need only **send**
simple commands and the **decrypted** **content** is output...
Basic Derwent Week: **200255**

 23/5,K/21   **(Item 16 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0012314560 - Drawing available
WPI ACC NO: 2002-256106/ **200230**
XRPX Acc No: N2002-198103
**Entertainment apparatus compresses and encrypts data read from recording
medium for auxiliary processor**
Patent Assignee: HATAKEYAMA A (HATA-I); HORIKAWA T (HORI-I); SONY
   COMPUTER ENTERTAINMENT INC (SONY); SONY COMPUTER ENTERTAINMENT KK
   (SONY)
Inventor: HATAKEYAMA A; HORIKAWA T
Patent Family (10 patents, 30 countries)
Patent   Application

Number	Kind	Date	Number	Kind	Date	Update	
WO 2001065342	A1	20010907	WO 2001JP1584	A	20010301	200230	B
AU 200136035	A	20010912	AU 200136035	A	20010301	200230	E
BR 200105434	A	20020219	BR 20015434	A	20010301	200230	E
			WO 2001JP1584	A	20010301		
JP 2001318768	A	20011116	JP 200152360	A	20010227	200230	E
US 20010024503	A1	20010927	US 2001797422	A	20010301	200230	E
EP 1196837	A1	20020417	EP 2001908213	A	20010301	200233	E
			WO 2001JP1584	A	20010301		
KR 2002021093	A	20020318	KR 2001714018	A	20011102	200263	E
CN 1364250	A	20020814	CN 2001800412	A	20010301	200280	E
MX 2001010826	A1	20020501	WO 2001JP1584	A	20010301	200368	E
			MX 200110826	A	20011025		
TW 592774	A	20040621	TW 2001104898	A	20010302	200506	E

Priority Applications (no., kind, date): JP 200058045   A 20000302; JP
   200152360   A 20010227

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001065342	A1	EN	21	2	

National Designated States,Original: AU BR CA CN KR MX NZ RU SG
Regional Designated States,Original: BE CH DE DK ES FI FR GB IT NL SE

AU 200136035	A	EN			Based on OPI patent WO 2001065342
BR 200105434	A	PT			PCT Application WO 2001JP1584
					Based on OPI patent WO 1999056428
JP 2001318768	A	JA	7		
EP 1196837	A1	EN			PCT Application WO 2001JP1584
					Based on OPI patent WO 2001065342

Regional Designated States,Original: AL BE CH DE DK ES FI FR GB IT LI LT
   LV MK NL RO SE SI

MX 2001010826	A1	ES			PCT Application WO 2001JP1584
					Based on OPI patent WO 2001065342
TW 592774	A	ZH			

Alerting Abstract WO A1
NOVELTY - A main processor (7) operates a loading mechanism (6) with an
auxiliary processor for reading encrypted data from a recording medium and
loading it into the internal memory. A security module (9) has a recorded
decryption key and provides it to the auxiliary processor for
decompression. Generated digital data is loaded into the internal memory
(3) via a queue (1) using direct memory access transfer.
DESCRIPTION - There are INDEPENDENT CLAIMS for

1. a semiconductor device in an entertainment apparatus,

2. a computer program,

3. a computer processor loading method.

USE - Apparatus is for loading digital information into an internal
memory from an external recording medium such as a CD-ROM or DVD-ROM
ADVANTAGE - Apparatus reads program code from the external medium without
overloading the CPU.
DESCRIPTION OF DRAWINGS - The figure shows the apparatus with
1 queue
3 internal memory
6 loading mechanism
7 main processor
9 security module

Title Terms/Index Terms/Additional Words: ENTERTAINMENT; APPARATUS;
   COMPRESS; DATA; READ; RECORD; MEDIUM; AUXILIARY; PROCESSOR

Class Codes
International Classification (Main): A63F-009/22, G06F-009/06
 (Additional/Secondary): G06F-003/05
International Classification (+ Attributes)
IPC + Level Value Position Status Version
   A63F-0013/10   A   I   R   20060101
   G06F-0003/08   A   I   F R   20060101
   G11B-0020/10   A   I   L R   20060101

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A63F-0013/10   C  I      R  20060101
G06F-0003/08   C  I   F  R  20060101
G11B-0020/10   C  I   L  R  20060101
US Classification, Issued: 380200000
```

File Segment: EngPI; EPI;
DWPI Class: T01; W04; P36
Manual Codes (EPI/S-X): T01-C01A; T01-D01; T01-F01B; T01-H05B2; T01-J12C;
  T01-S03; W04-C10A1; W04-C10A2

Original Publication Data by Authority

Original Abstracts:
The entertainment apparatus comprises a main **bus** and a subbus, **which**
are connected to each other via a center **bus** having a queue. **A** CPU, a
memory, an image processor and a DMAC are connected to the main **bus** . A
disk drive, **an** I/O processor, a sound processor, and a security module
are connected to the subbus. A program...

...The entertainment apparatus comprises a main **bus** and a subbus, which
are connected to each **other** via a center **bus** having a queue. A CPU, a
memory, an **image** processor and a DMAC are connected to the main **bus** . A
disk drive, an I/O processor, a **sound** processor, **and** a security module
are connected to the subbus. A program code, which is compressed and
partially encrypted, is recorded on a secondary recording medium. The I/O
processor obtains a **decryption** key from the security module. The I/O
processor **decrypts** digital information read from the secondary recording
medium **based** on the **decryption** key and decompresses the digital
information. The decompressed **digital** information is written into the
memory via the queue **using** a DMA **transfer** .

...

...The entertainment apparatus comprises a main **bus** and a subbus, which
are connected to each other via a center **bus** **having** a queue. A CPU, a
memory, an image processor and a DMAC **are** connected to the main **bus** . A
disk drive, an I/O processor, a sound processor, and a security **module**
are **connected** to the subbus. A program code, which is compressed and
partially encrypted, is recorded on a secondary recording medium. The I/O
processor obtains a **decryption** key from the security module. The I/O
processor **decrypts** digital information read **from** the secondary
recording medium based on the **decryption** **key** **and** decompresses the
digital information. The decompressed digital information is written into
the memory via the queue using **a** DMA transfer.

  Basic Derwent Week: **200230**

  23/5,K/22   (Item 17 from file: 350)

0010833615   - Drawing available
WPI ACC NO: 2001-451240/ **200148**
XRPX Acc No: N2001-334137
Data distribution system with encryption card
Patent Assignee: FUJITSU LTD (FUIT); HITACHI LTD (HITA); NIPPON COLUMBIA
  KK (NPCO); SANYO ELECTRIC CO LTD (SACL); DENON CO LTD (NPCO); RENESAS
  TECHNOLOGY KK (RENE-N)
Inventor: ANAZAWA T; ANAZAWA T N C C L; FURUTA S; FURUTA S F L; HASEBE T;
  HASEBE T F L; HATAKEYAMA T; HATAKEYAMA T F L; HATANAKA M; HATANAKA M F L;
  HIOKI T; HIOKI T S E C L; HORI Y; HORI Y S E C L; KAMADA F L; KAMADA J;
  KANAMORI M; KANAMORI M S E C L; KINOSHITA T; KINOSHITA T S; KOTANI S;
  KOTANI S F L
Patent Family (9 patents, 94 countries)

Patent			Application				
Number	Kind	Date	Number	Kind	Date	Update	
WO 2001016932	A1	20010308	WO 2000JP5770	A	20000825	200148	B
AU 200067318	A	20010326	AU 200067318	A	20000825	200148	E
EP 1221690	A1	20020710	EP 2000955044	A	20000825	200253	E
			WO 2000JP5770	A	20000825		

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CN 1382292        A   20021127   CN 2000814631   A   20000825   200322   E
JP 2001520398      X   20030325   WO 2000JP5770    A   20000825   200323   E
                                  JP 2001520398    A   20000825
TW 499669          A   20020821   TW 2001104238    A   20010223   200333   E
CN 1231885         C   20051214   CN 2000814631    A   20000825   200654   E
US 7181629         B1  20070220   WO 2000JP5770    A   20000820   200716   E
                                  US 200269112     A   20020619
JP 4010481         B2  20071121   WO 2000JP5770    A   20000825   200780   E
                                  JP 2001520398    A   20000825
```

Priority Applications (no., kind, date): JP 1999241747 A 19990827; JP
   1999345229 A 19991203

Patent Details

```
Number             Kind  Lan   Pg   Dwg   Filing Notes
WO 2001016932      A1    JA    142  56
National Designated States,Original:   AE AG AL AM AT AU AZ BA BB BG BR BY
   BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
   IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
   PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Regional Designated States,Original:   AT BE CH CY DE DK EA ES FI FR GB GH
   GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
AU 200067318       A     EN          Based on OPI patent    WO 2001016932
EP 1221690         A1    EN          PCT Application  WO 2000JP5770
                                     Based on OPI patent    WO 2001016932
Regional Designated States,Original:   AL AT BE CH CY DE DK ES FI FR GB GR
   IE IT LI LT LU LV MC MK NL PT RO SE SI
JP 2001520398      X     JA          PCT Application  WO 2000JP5770
                                     Based on OPI patent    WO 2001016932
TW 499669          A     ZH
US 7181629         B1    EN          PCT Application  WO 2000JP5770
                                     Based on OPI patent    WO 2001016932
JP 4010481         B2    JA    70    PCT Application  WO 2000JP5770
                                     Based on OPI patent    WO 2001016932
```

Alerting Abstract WO A1
  NOVELTY - Memory **card** (110) extracts session key by decoding data
provided on data **bus** (BS3) through cellular network from server.
Encryption unit (1406) encrypts public key Kpcard (1) of memory **card**
(110) based on session key and sends it to server over data **bus**. Register
(1500) stores decrypted data, such as license ID and user ID and memory
(1412) stores content data ([Dc]Kc) encrypted by license key (Kc) and
supplied over data **bus** (BS3).
  USE - Data distribution system with encryption card.
  DESCRIPTION OF DRAWINGS - BS3 Data bus
  1 Kpcard
  110 Memory card
  1406 Encryption means
  1412 Memory
  1500 Register

Title Terms/Index Terms/Additional Words: DATA; DISTRIBUTE; SYSTEM;
  ENCRYPTION; CARD

Class Codes
International Classification (Main): G10K-015/02
 (Additional/Secondary): G06F-013/00, G06F-015/00, G06F-017/30, G06K-019/00
 , G10L-019/00, H04H-001/00, H04L-012/28, H04L-009/08, H04L-009/10,
 H04L-009/32, H04M-011/08, H04M-003/42, H04M-003/493
International Classification (+ Attributes)
```
IPC + Level Value Position Status Version
  G10K-0015/02   A  I       R  20060101
  H04L-0029/06   A  I       R  20060101
  H04L-0009/08   A  I       R  20060101
  H04L-0009/10   A  I       R  20060101
  H04L-0009/32   A  I    F  B  20060101
  G06F-0013/00   A  I    L  B  20060101
  G06F-0015/00   A  I    L  B  20060101
  G10K-0015/02   A  I    F  B  20060101
  G10L-0019/00   A  I    L  B  20060101
  H04L-0012/00   A  I    L  B  20060101
  H04L-0009/08   A  I    L  B  20060101
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H04L-0009/10    A  I  L  B  20060101
H04M-0011/08    A  I  L  B  20060101
G10K-0015/02    C  I     R  20060101
H04L-0029/06    C  I     R  20060101
H04L-0009/08    C  I     R  20060101
H04L-0009/10    C  I     R  20060101
H04L-0009/32    C  I     B  20060101
G06F-0013/00    C  I     B  20060101
G06F-0015/00    C  I     B  20060101
G10K-0015/02    C  I     B  20060101
G10L-0019/00    C  I     B  20060101
H04L-0012/00    C  I     B  20060101
H04L-0009/08    C  I     B  20060101
H04L-0009/10    C  I     B  20060101
H04M-0011/08    C  I     B  20060101
```
US Classification, Issued: 713194000, 713189000

File Segment: EngPI; EPI;
DWPI Class: T01; T04; W01; W02; W04; P86
Manual Codes (EPI/S-X): T01-H01B3A; T01-J05A; T04-K02; W01-A03B; W01-A05A;
    W01-A06E1A; W01-A06G2; W01-C02B; W01-C05B5; W01-C05B5C; W02-D; W04-V05G

...NOVELTY - Memory **card** (110) extracts session key by decoding data
provided on data **bus** (BS3) through cellular network from server.
Encryption unit (1406) encrypts public key Kpcard (1) of memory **card**
(110) based on session key and sends it to server over data **bus**. Register
(1500) stores decrypted data, such as license ID and user ID and memory
(1412) stores content data ([Dc]Kc) encrypted by license key (Kc) and
supplied over data **bus** (BS3).

Original Publication Data by Authority

Original Abstracts:
...to extract a session key Ks from data applied from a server to a data
bus BS3 over a cellular phone network. An encryption processing unit 1406
encrypts public encryption key KPcard(1) of memory **card** 110 based on
session key Ks, and applies the same to the server via data **bus** BS3. A
register 1500 receives and stores data such as decrypted license ID and
user...
...and a memory 1412 receives and stores encrypted content data [Dc]Kc
applied from data **bus** BS3 and encrypted with a license key Kc...

...A memory **card** performs decryption processing to extract a session key
from data applied from a server to a data **bus** over a cellular phone
network. An encryption processing unit encrypts a public encryption key of
memory **card** based on a session key, and applies the same to the server
via data **bus**. A register receives and stores data such as a decrypted
license ID and a user...

...the server, and a memory receives and stores encrypted content data
applied from a data **bus** and encrypted with a license key...

...A memory **card** (110) extracts a session key (Ks) by decoding data
provided on a data **bus** (BS3) through a cellular network from a server.
Encryption means (1406) encrypts a public key KPcard (1) of the memory
card (110) based on the session key Ks and sends it to the server over the
data **bus** (BS3). A register (1500) stores decrypted data, such as a
license ID and a user...
Claims:
...key; a first license data encryption processing unit (320) for
encrypting a license key for **decrypting** said encrypted content data
using, as key data, the data **decrypted** by said session key **decrypting**
unit; and a second license data encryption processing **unit** (322) for
further encrypting an output of said first license data encryption
processing unit with...

...unit (110) for receiving and storing said encrypted content data; and
said distributed data decoding **unit** includes: a first key holding **unit**
(1402) for holding a first private **decryption** key for **decrypting** the
data encrypted by said first public encryption key, a first decryption
processing unit (1404...

...holding a second private decryption key for decrypting the data encrypted with said second public **encryption** key, and a third decryption processing unit (1416) for decrypting said license key with said...

...key extracted by said session key decrypting unit; and a second license data encryption processing **unit** for further encrypting the output of said first license data encryption processing **unit** with said second symmetric key extracted by said session key **decrypting unit** , and supplying the encrypted output to said first interface **unit** , wherein each of said terminals includes: a second interface unit for externally **transmitting** the data, and a data storing unit for **receiving** and storing at least said license key from said content data supply device; said first...

Basic Derwent Week: **200148**

23/5, K/23   (Item 18 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2008 The Thomson Corporation. All rts. reserv.

0010808902   - Drawing available
WPI ACC NO: 2001-425346/ **200145**
XRPX Acc No: N2001-315582
Memory card and data distribution system for storage and redistribution of data
Patent Assignee: FUJITSU LTD (FUIT); HITACHI LTD (HITA); NIPPON COLUMBIA
    KK (NPCO); PFU LTD (USAE); SANYO ELECTRIC CO LTD (SAOL); ANNAZAWA T
    (ANNA-I); FURUTA S (FURU-I); HASEBE T (HASE-I); HATAKEYAMA T (HATA-I);
    HICKI T (HICK-I); HORI Y (HORI-I); KANAMORI M (KANA-I); TAKAHASHI M
    (TAKA-I); TAKEMURA H (TAKE-I); TONEGAWA T (TONE-I); YOSHIKAWA T
    (YOSH-I); DENON CO LTD (NPCO); RENESAS TECHNOLOGY KK (RENE-N)
Inventor: ANAZAWA T; ANAZAWA T N C C L; ANNAZAWA T; FURUTA S; FURUTA S F L;
    HASEBE T; HASEBE T F L; HATAKEYAMA T; HATAKEYAMA T F L; HICKI T; HICKI T
    S E C L; HORI Y; HORI Y S E C L; KANAMORI M; KANAMORI M S E C L;
    TAKAHASHI M; TAKAHASHI M P L; TAKEMURA H; TAKEMURA H S E C L; TONEGAWA T;
    TONEGAWA T S; YOSHIKAWA T; YOSHIKAWA T S E C L
Patent Family (9 patents,   94 countries)

Patent			Application				
Number	Kind	Date	Number	Kind	Date	Update	
WO 2001041356	A1	20010607	WO 2000JP8544	A	20001201	200145	B
AU 200115574	A	20010612	AU 200115574	A	20001201	200154	E
EP 1237324	A1	20020904	EP 2000978073	A	20001201	200266	E
			WO 2000JP8544	A	20001201		
US 20020184154	A1	20021205	WO 2000JP8544	A	20001201	200301	E
			US 2002130301	A	20020531		
TW 493333	A	20020701	TW 2000125701	A	20001202	200329	E
JP 2001542505	X	20030603	WO 2000JP8544	A	20001201	200346	E
			JP 2001542505	A	20001201		
CN 1433608	A	20030730	CN 2000818755	A	20001201	200365	E
CN 1277364	C	20060927	CN 2000818755	A	20001201	200706	E
JP 3873090	B2	20070124	WO 2000JP8544	A	20001201	200708	E
			JP 2001542505	A	20001201		

Priority Applications (no., kind, date): JP 1999343389 A 19991202

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001041356	A1	JA	75	24	

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY
    BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
    IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
    PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH
    GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200115574	A	EN			Based on OPI patent WO 2001041356
EP 1237324	A1	EN			PCT Application WO 2000JP8544
					Based on OPI patent WO 2001041356

Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR
    IE IT LI LT LU LV MC MK NL PT RO SE SI TR

US 20020184154	A1	EN			PCT Application WO 2000JP8544
TW 493333	A	ZH			
JP 2001542505	X	JA			PCT Application WO 2000JP8544

Alerting Abstract WO A1

NOVELTY - Memory **card** (110) extracts first cession key (Ks1) and transaction ID from server by decrypting data on data **bus** (BS3). It generates second cession key (Ks2) with cession key generating section (1418), encrypts it and key (KPm(1)) unique to memory **card** (110), with first cession key and transmits to server as keys for encrypting content key.

DESCRIPTION - A memory **card** (110) performs authentication with a server based on data held in an authentication data holding section (1400). The memory **card** (110) extracts a first cession key (Ks1) and a transaction ID from the server by decrypting data placed on a data **bus** (BS3). Furthermore, the memory **card** (110) generates a second cession key (Ks2) by means of a cession key generating section (1418), encrypts the second cession key (Ks2) and a key (KPm(1)) unique to the memory **card** (110) with the first cession key (Ks1) and transmits them to the server as keys for encrypting the content key when the content key is decrypted. The transaction ID and the second cession key (Ks2) held in a log memory (1460) are used in redistribution.

USE - Memory card and data distribution system for storage and redistribution of data

DESCRIPTION OF DRAWINGS - Diagram of memory card. (Drawing contains non-English language text)

    110 Memory card
    1400 Authentication data holding section
    Ks1 First cession key
    BS3 Data bus
    Ks2 Second cession key
    1418 Cession key generating section
    KPm(1 Key
    1460 Log memory
Title Terms/Index Terms/Additional Words: MEMORY; CARD; DATA; DISTRIBUTE; SYSTEM; STORAGE; REDISTRIBUTE

Class Codes

International Classification (Main): G06F-015/00, H04M-011/08
 (Additional/Secondary): G06F-012/14, G06F-017/60, G06K-019/00, G06K-019/10
 , G09C-001/00, H04L-009/08, H04L-009/10, H04L-009/14, H04L-009/16,
H04L-009/32
International Classification (+ Attributes)

IPC	+	Level	Value	Position	Status	Version
G06F-0001/00	A	I			R	20060101
G06F-0021/00	A	I			R	20060101
H04L-0009/10	A	I			R	20060101
G06F-0012/14	A	I	L			20060101
G06F-0012/14	A	I	L	B		20060101
G06F-0013/00	A	I	L			20060101
G06F-0021/00	A	I	F	B		20060101
G06K-0019/00	A	I	L	B		20060101
G06K-0019/10	A	I	L	B		20060101
G06Q-0030/00	A	I	L	B		20060101
G06Q-0050/00	A	I	L	B		20060101
G09C-0001/00	A	I	L	B		20060101
G10K-0015/02	A	I	L			20060101
H04L-0009/08	A	I	L	B		20060101
H04L-0009/10	A	I	F			20060101
H04L-0009/10	A	I	L	B		20060101
H04L-0009/14	A	I	L	B		20060101
H04L-0009/16	A	I	L	B		20060101
H04L-0009/32	A	I	L	B		20060101
G06F-0001/00	C	I			R	20060101
G06F-0021/00	C	I			R	20060101
H04L-0009/10	C	I			R	20060101
G06F-0012/14	C	I				20060101
G06F-0012/14	C	I	L	B		20060101
G06F-0013/00	C	I				20060101
G06F-0021/00	C	I	F	B		20060101
G06K-0019/00	C	I	L	B		20060101
G06K-0019/10	C	I	L	B		20060101

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G06Q-0030/00   C  I  L  B  20060101
G06Q-0050/00   C  I  L  B  20060101
G09C-0001/00   C  I  L  B  20060101
G10K-0015/02   C  I        20060101
H04L-0009/08   C  I  L  B  20060101
H04L-0009/10   C  I        20060101
H04L-0009/10   C  I  L  B  20060101
H04L-0009/14   C  I  L  B  20060101
H04L-0009/16   C  I  L  B  20060101
H04L-0009/32   C  I  L  B  20060101
US Classification, Issued: 705050000
```

File Segment: EngPI; EPI;
DWPI Class: T01; W01; P85; P86
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-H05B; W01-A05A

Alerting Abstract ...NOVELTY - Memory **card** (110) extracts first cession key (Ks1) and transaction ID from server by decrypting data on data **bus** (BS3). It generates second cession key (Ks2) with cession key generating section (1418), encrypts it and key (KPm(1)) unique to memory **card** (110), with first cession key and transmits to server as keys for encrypting content key. DESCRIPTION - A memory **card** (110) performs authentication with a server based on data held in an authentication data holding section (1400). The memory **card** (110) extracts a first cession key (Ks1) and a transaction ID from the server by decrypting data placed on a data **bus** (BS3). Furthermore, the memory **card** (110) generates a second cession key (Ks2) by means of a cession key generating section...
...encrypts the second cession key (Ks2) and a key (KPm(1)) unique to the memory **card** (110) with the first cession key (Ks1) and transmits them to the server as keys...

Original Publication Data by Authority

Original Abstracts:
A memory **card** (110) conducts an authentication process with a server based on data stored in an authentication data hold unit (1400). The memory **card** (110) extracts a first session key (Ks1) from a server by a decryption process and a transaction ID from the data applied on a data **bus** (BS3). The memory **card** (110) generates a second session key (Ks2) through a session key generation **unit** (1418), and transmits to the server, as the keys to encrypt **content** **data** in **receiving** **decryption** of **content** **data**, the second session key (Ks2) and a key (KPm(1)) unique to the memory **card** (110) in an encrypted state with the first session key (Ks1). The transaction ID and...

...A memory **card** (110) conducts an authentication process with a server based on data stored in an authentication data hold unit (1400). The memory **card** (110) extracts a first session key (Ks1) from a server by a decryption process and a transaction ID from the data applied on a data **bus** (BS3). The memory **card** (110) generates a second session key (Ks2) through a session key generation **unit** (1418), and transmits to the server, as the keys to encrypt **content** **data** in **receiving** **decryption** of **content** **data**, the second session key (Ks2) and a key (KPm(1)) unique to the memory **card** (110) in an encrypted state with the first session key (Ks1). The transaction ID and...

...A memory **card** (110) performs authentication with a server based on data held in an authentication data holding section (1400). The memory **card** (110) extracts a first cession key (Ks1) and a transaction ID from the server by decrypting data placed on a data **bus** (BS3). Furthermore, the memory **card** (110) generates a second cession key (Ks2) by means of a cession key generating section...

...encrypts the second cession key (Ks2) and a key (KPm(1)) unique to the memory **card** (110) with the first cession key (Ks1) and transmits them to the server as keys...
Basic Derwent Week: **200145**

23/5, K/24   (Item 19 from file: 350)

0010808895 - Drawing available
WPI ACC NO: 2001-425339/ **200145**
XRPX Acc No: N2001-315575
Recorder for encrypting and decrypting data
Patent Assignee: FUJITSU LTD (FUJI); HITACHI LTD (HITA); NIPPON COLUMBIA
  KK (NPCO); SANYO ELECTRIC CO LTD (SACL); ANAZAWA T (ANAZ-I); HASEBE T
  (HASE-I); HATAKEYAMA T (HATA-I); HIOKI T (HIOK-I); HORI Y (HORI-I);
  KANAMORI M (KANA-I); KOTANI S (KOTA-I); TONEGAWA T (TONE-I); DENON CO
  LTD (NPCO); RENESAS TECHNOLOGY KK (RENE-N)
Inventor: ANAZAWA T; ANAZAWA T N C C L; HASEBE T; HASEBE T F L; HATAKEYAMA
  T; HATAKEYAMA T F L; HIOKI T; HIOKI T S E C L; HORI Y; HORI Y S E C L;
  KANAMORI M; KANAMORI M S E C L; KOTANI S; KOTANI S F L; TONEGAWA T;
  TONEGAWA T S
Patent Family (9 patents, 94 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2001041104	A1	20010607	WO 2000JP8457	A	20001129	200145	B
AU 200116494	A	20010612	AU 200116494	A	20001129	200154	E
EP 1248248	A1	20021009	EP 2000979025	A	20001129	200267	E
			WO 2000JP8457	A	20001129		
US 20020184513	A1	20021205	WO 2000JP8457	A	20001129	200301	E
			US 2002130294	A	20020530		
TW 493332	A	20020701	TW 2000125435	A	20001130	200329	E
JP 2001542083	X	20030603	WO 2000JP8457	A	20001129	200346	E
			JP 2001542083	A	20001129		
CN 1425173	A	20030618	CN 2000818632	A	20001129	200358	E
US 7158641	B2	20070102	WO 2000JP8457	A	20001129	200703	E
			US 2002130294	A	20020530		
JP 3934941	B2	20070620	WO 2000JP8457	A	20001129	200742	E
			JP 2001542083	A	20001129		

Priority Applications (no., kind, date): JP 1999340365 A 19991130

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001041104	A1	JA	77	27	

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY
  BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
  IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
  PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH
  GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200116494	A	EN			Based on OPI patent WO 2001041104
EP 1248248	A1	EN			PCT Application WO 2000JP8457
					Based on OPI patent WO 2001041104

Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR
  IE IT LI LT LU LV MC MK NL PT RO SE SI TR

US 20020184513	A1	EN			PCT Application WO 2000JP8457
TW 493332	A	ZH			
JP 2001542083	X	JA			PCT Application WO 2000JP8457
					Based on OPI patent WO 2001041104
US 7158641	B2	EN			PCT Application WO 2000JP8457
					Based on OPI patent WO 2001041104
JP 3934941	B2	JA	37		PCT Application WO 2000JP8457
					Based on OPI patent WO 2001041104

Alerting Abstract WO A1
  NOVELTY - Memory **card** (110) decodes data delivered to data **bus** (BS3)
and extracts session key (Ks1) sent from server from data. Based on session
key (Ks1), encrypting section (1406) encrypts public encryption key
(KPm(1)) of memory **card** (110) and delivers it to server through data **bus**
  (BS3). Memory **card** (110) receives data including license key (Kc) and
license (ID) encrypted with public encryption key (KPm(1)) different with
memory **card** to memory **card**, decrypts data, encrypted it again with
uniquely given secret key (K(1)), and stores it in memory (1415).
  USE - Recorder for encrypting and decrypting data
  DESCRIPTION OF DRAWINGS - 110 Memory card
  1406 Encrypting section
  Kc License key

K(1 Secret key
1415 Memory

Title Terms/Index Terms/Additional Words: RECORD; DATA

Class Codes
International Classification (Main): H04L-009/10, H04M-011/08
 (Additional/Secondary): G11B-020/10, H04L-012/28, H04L-009/08
International Classification (+ Attributes)
IPC + Level Value Position Status Version

IPC + Level	Value	Position	Status	Version
G06F-0001/00	A I		R	20060101
G06Q-0020/00	A I		R	20060101
G06Q-0030/00	A I		R	20060101
G07F-0017/16	A I		R	20060101
G07F-0007/00	A I		R	20060101
G07F-0007/10	A I		R	20060101
H04L-0009/00	A I	F	B	20060101
H04L-0009/08	A I		R	20060101
H04L-0009/30	A N		R	20060101
H04L-0009/32	A I	L	B	20060101
H04L-0012/28	A I	L	B	20060101
H04L-0009/08	A I	L	B	20060101
H04L-0009/10	A I	F	B	20060101
G06F-0001/00	C I		R	20060101
G06Q-0020/00	C I		R	20060101
G06Q-0030/00	C I		R	20060101
G07F-0017/00	C I		R	20060101
G07F-0007/00	C I		R	20060101
G07F-0007/10	C I		R	20060101
H04L-0009/08	C I		R	20060101
H04L-0009/28	C N		R	20060101
H04L-0012/28	C I		B	20060101
H04L-0009/08	C I		B	20060101
H04L-0009/10	C I		B	20060101

US Classification, Issued: 713193000, 380277000, 380272000, 380044000,
 380046000, 713189000

File Segment: EngPI; EPI;
DWPI Class: T01; W01; P85
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-H05B; T01-H07C5S; W01-A05A
 ; W01-C01D1

...NOVELTY - Memory **card** (110) decodes data delivered to data **bus** (BS3)
and extracts session key (Ks1) sent from server from data. Based on session
key (Ks1), encrypting section (1406) encrypts public encryption key
(KPm(1)) of memory **card** (110) and delivers it to server through data **bus**
 (BS3). Memory **card** (110) receives data including license key (Kc) and
license (ID) encrypted with public encryption key (KPm(1)) different with
memory **card** to memory **card**, decrypts data, encrypted it again with
uniquely given secret key (K(1)), and stores it...

Original Publication Data by Authority

Original Abstracts:
A memory **card** (110) decrypts data applied from a data **bus** (BS3) to
extract a session key (Ks1) from a server. An encryption processing portion
(1406) encrypts a public encryption key (KPm(1)) of the memory **card** (110)
based on the session key (Ks1), and applies the encrypted key to the server
via the data **bus** (BS3). The memory **card** (110) receives data such as a
license key (Kc) and a license (ID) encrypted with the public encryption
key (KPm(1)) unique to each memory **card**, decrypts the received data and
stores the received data in a memory (1415) after encrypting...

...A memory **card** (110) decodes data delivered to a data **bus**
(BS3) and extracts a session key (Ks1) sent from a server
from the data. Based...

...Ks1), an encrypting section (1406) encrypts a public
encryption key (KPm(1)) of the memory **card** (110) and
delivers it to a server through the data **bus** (BS3). The memory
card (110) receives data including a license key (Kc) and a license

(ID) encrypted with the public encryption key (KPm(1)) different
with memory **card** to memory **card**, decrypts the data, encrypted it again
with uniquely given secret key (K(1)), and stores...

...A memory **card** (110) decodes data delivered to a data **bus**
(BS3) and extracts a session key (Ks1) sent from a server
from the data. Based...

...Ks1), an encrypting section (1406) encrypts a public
encryption key (KPm(1)) of the memory **card** (110) and
delivers it to a server through the data **bus** (BS3). The memory
card (110) receives data including a license key (Kc) and a license
(ID) encrypted with the public encryption key (KPm(1)) different
with memory **card** to memory **card**, decrypts the data, encrypted it again
with uniquely given secret key (K(1)), and stores...

...A memory **card** (110) decodes data delivered to a data **bus** (BS3) and
extracts a session key (Ks1) sent from a server from the data. Based...

...Ks1), an encrypting section (1406) encrypts a public encryption key (KPm
(1)) of the memory **card** (110) and delivers it to a server through the
data **bus** (BS3). The memory **card** (110) receives data including a license
key (Kc) and a license (ID) encrypted with the public encryption key (KPm
(1)) different with memory **card** to memory **card**, decrypts the data,
encrypted it again with uniquely given secret key (K(1)), and stores...
Claims:
...encrypted with a first public encryption key (KPm(i)) predetermined with
respect to the recording **device**, comprising:a first key holding portion
(1421) for holding a first private **decryption** key (Km(i)) being
asymmetric to said first public encryption key and used for decrypting data
encrypted with said first public encryption key;a first decryption
processing portion (1422) for **receiving** the data encrypted with said
first public encryption key, and decrypting the **received data** with said
first private decryption key;a second key holding portion (1450, 1451) for
holding...
Basic Derwent Week: **200145**

23/5,K/26 **(Item 21 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
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0010281318 - Drawing available
WPI ACC NO: 2000-594460/ **200056**
XRPX Acc No: N2001-025262
**Data processing system for collecting flight data for producing pilot
report logs, has portable memory device which is downloaded on a ground
station processing station by authorized personnel**
Patent Assignee: APEC AEROSPACE PTE LTD (APEC-N); M L-COM TECHNOLOGIES PTE
  LTD (MLC-N)
Inventor: JIANG J L; LIU J J
Patent Family (3 patents, 89 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2000055770	A2	20000921	WO 2000SG35	A	20000313	200056	B
AU 200035796	A	20001004	AU 200035796	A	20000313	200101	E
US 6278913	B1	20010821	US 1999267500	A	19990312	200150	E

Priority Applications (no., kind, date): US 1999267500 A 19990312

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2000055770	A2	EN	28	12	

National Designated States,Original: AE AL AM AT AU AZ BA BB BG BR BY CA
  CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
  KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO
  RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH
  GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200035796	A	EN	Based on OPI patent	WO 2000055770

  Alerting Abstract WO A2

NOVELTY - The system accesses signals transmitted on an airborne data bus (layer 2), where the signals represent sensor readings. The sensors (layer 1) on the **aircraft** are used to measure flight parameters for the entire flight. The signals are then transferred to a smart log box (layer 3) which then samples, filters, decodes, encodes and compresses the signals prior to being stored on a portable, self protected secure memory device, e.g. smart **card** .

DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of processing flight parameter data.

USE - For recording and monitoring flight data for analyzing and processing the data.

ADVANTAGE - To monitor a pilots performance, the operation of the aircraft and identifying potential mechanical or safety problems.

DESCRIPTION OF DRAWINGS - The figure shows a diagram of the automated flight data management.

1 Sensors
2 Digital airborne data bus
3 Smart log box

Title Terms/Index Terms/Additional Words: DATA; PROCESS; SYSTEM; COLLECT; FLIGHT; PRODUCE; PILOT; REPORT; LOG; PORTABLE; MEMORY; DEVICE; GROUND; STATION; PERSONNEL

Class Codes

International Classification (+ Attributes)
IPC + Level Value Position Status Version
  G06F-0017/40 A I   R 20060101
  G06F-0017/40 C I   R 20060101
US Classification, Issued: 701003000, 701014000, 701025000, 701035000, 701120000, 702144000, 073181000, 244158000

File Segment: EPI;
DWPI Class: T01; T04; W01; W05; W06
Manual Codes (EPI/S-X): T01-D01; T01-H01B3A; T01-J05A2; T01-J07A3; T04-K02; W01-A02A; W01-A05; W05-D05B; W05-D07D; W06-B01B5; W06-B01B6; W06-B01B8; W06-B02D; W06-B02X

...bus (layer 2), where the signals represent sensor readings. The sensors (layer 1) on the **aircraft** are used to measure flight parameters for the entire flight. The signals are then transferred...

...prior to being stored on a portable, self protected secure memory device, e.g. smart **card** .

Original Publication Data by Authority

Original Abstracts:

...self-protected secure memory device. After the flight ends, the portable, self-protected secure memory **device** is transferred to **ground** personnel. The data stored on the memory **device** is then accessed **by** authorized personnel, decompressed and **decrypted** . The flight data **is** analyzed and used to evaluate pilot performance and monitor the operation of the aircraft throughBasic Derwent Week: **200056**

 23/5,K/28   (Item 23 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0009657759 - Drawing available
WPI ACC NO: 1999-610660/ **199952**
XRPX Acc No: N1999-449961
Organizing and transferring data among functional blocks of integrated system of read channel of data recorded on DVD-ROM, DVD-RAM and DVD-R for performing Reed-Solomon decoding
Patent Assignee: STMICROELECTRONICS SRL (SGSA)
Inventor: ANDOLINA G; BRENNA F; DE MARZI G; UGIOLI R
Patent Family (6 patents, 18 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 1999048097	A1	19990923	WO 1998IT56	A	19980318	199952	B

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EP 986814          A1   20000322   EP 1998908287   A   19980318   200019   E
                               WO 1998IT56      A   19980318
JP 2002501655      W    20020115   WO 1998IT56      A   19980318   200207   E
                               JP 1999546810    A   19980318
US 6594794         B1   20030715   WO 1998IT56      A   19980318   200348   E
                               US 1999424144    A   19991118
EP 986814          B1   20031105   EP 1998908287   A   19980318   200377   E
                               WO 1998IT56      A   19980318
DE 69819498        E    20031211   DE 69819498      A   19980318   200405   E
                               EP 1998908287   A   19980318
                               WO 1998IT56      A   19980318
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Priority Applications (no., kind, date): WO 1998IT56 A 19980318

Patent Details

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Number            Kind  Lan  Pg   Dwg   Filing Notes
WO 1999048097     A1    EN   61   31
National Designated States,Original:   JP US
Regional Designated States,Original:   AT BE CH DE DK ES FI FR GB GR IE IT
    LU MC NL PT SE
EP 986814         A1    EN                PCT Application  WO 1998IT56
                                          Based on OPI patent    WO 1999048097
Regional Designated States,Original:   DE FR GB IT
JP 2002501655     W     JA   60           PCT Application  WO 1998IT56
                                          Based on OPI patent    WO 1999048097
US 6594794        B1    EN                PCT Application  WO 1998IT56
                                          Based on OPI patent    WO 1999048097
EP 986814         B1    EN                PCT Application  WO 1998IT56
                                          Based on OPI patent    WO 1999048097
Regional Designated States,Original:   DE FR GB IT
DE 69819498       E     DE                Application  EP 1998908287
                                          PCT Application  WO 1998IT56
                                          Based on OPI patent    EP 986814
                                          Based on OPI patent    WO 1999048097
```

Alerting Abstract WO A1

NOVELTY - An embedded RAM (DRAM) is refreshed while decoding of two blocks is in progress. Two columns of 208 bytes each of the stored input blocks is decoded by reading the columns word by word from the embedded RAM (DRAM) and performing parallel Reed-Solomon decoding on two columns at the time in the Reed-Solomon decoder, correcting errors and storing decoding flags in the embedded RAM (DRAM).

USE - In a read-channel circuitry of data read from a mass memory support such as a DVD or a CD for decoding according to the Reed-Solomon algorithm data read from a mass memory support coded according to standard DVD-ROM, DVD-R, DVDRAM or CD-ROM protocols.

ADVANTAGE - Provides considerable increase of the required processing speed capabilities in a fully integrated decoder (ECC-IC) may be obtained by organizing the data flow within the integrated decoder and the embedded RAM in a way as to reduce the number of accesses to the embedded RAM needed to perform the decoding at the required speed while using the Reed-Solomon decoding block at twice the maximum clock frequency allowed by the embedded RAM (25MHz)

DESCRIPTION OF DRAWINGS - The drawing is an architectural layout of the multifunction decoder ECC-IC of the invention.

Title Terms/Index Terms/Additional Words: TRANSFER; DATA; FUNCTION; BLOCK; INTEGRATE; SYSTEM; READ; CHANNEL; RECORD; ROM; RAM; PERFORMANCE; REED; DECODE

Class Codes

```
International Classification (Main): G11B-020/18
International Classification (+ Attributes)
IPC + Level Value Position Status Version
   G06F-0011/10   A   I   F   R   20060101
   G11B-0020/18   A   I   L   R   20060101
   H03M-0013/00   A   I       R   20060101
   H03M-0013/15   A   I   L   R   20060101
   G06F-0011/10   C   I   F   R   20060101
   G11B-0020/18   C   I   L   R   20060101
   H03M-0013/00   C   I   L   R   20060101
US Classification, Issued: 714784000
```

Original Publication Data by Authority

Original Abstracts:
...a read channel of data recorded on DVD-Rom, DVD-Ram, DVD-R or CD Rom
for performing Reed-Solomon decoding including off-line heroic
correction, or deinterleaving, Reed-Solomon decoding and correction, said
integrated system including an input buffer (INPUT BUFFER), an interface
with a microcontroller bus (muP IF), a Reed-Solomon decoder
(REED-SOLOMON DECODER), an embedded RAM (DRAM) accessed through a 17-bit
bus , a descrambling and EDC control block (DESCRAMBLING & EDC) for DVD
modes of operation a descrambling block (DESCRAMBLING CD) for CD
modes of operations, a data output interface (OUTPUT INTERFACE) and a
timing control block (TIMING CONTROL),permits the decoding...

...the functional blocks of an integrated system of a read channel of data
recorded on DVD-Rom, DVD-Ram, DVD-R or CD Rom for performing
Reed-Solomon decoding including off-line heroic correction, or
deinterleaving, Reed-Solomon decoding is provided. The integrated system
includes an input buffer, an interface with a microcontroller bus , a
Reed-Solomon decoder, an embedded RAM accessed through a 17-bit bus , a
descrambling and EDC control block for DVD modes of operation, a
descrambling block for CD codes of operations, a data output interface,
and a timing control block. The system permits the de coding of the input
data acquired through...

...input buffer at a rate of up to four-times the reference bit rate of
DVD formatted data using a clock for accessing the embedded RAM having a
frequency half that...

...on DVD-Rom, DVD-Ram, DVD-R or CD Rom for performing Reed-Solomon
decoding including off-line heroic correction , or deinterleaving,
Reed-Solomon decoding and correction, said integrated system including an
input buffer (INPUT BUFFER), an interface with a microcontroller bus (muP
IF), a Reed-Solomon decoder (REED-SOLOMON DECODER), an embedded RAM (DRAM)
accessed through a 17-bit bus , a descrambling and EDC control block
(DESCRAMBLING & EDC) for DVD modes of operation a descrambling block
(DESCRAMBLING CD) for CD modes of operations, a data output interface
(OUTPUT INTERFACE) and a timing control block (TIMING CONTROL),permits
the decoding of the input data acquired through said input buffer (INPUT
BUFFER) at a rate of up to four-times the reference bit rate of DVD
formatted data using a clock for accessing said embedded RAM having a
frequency half that...

...DVD-R ou CD Rom afin de proceder a un decodage REED-Solomon, y compris
des corrections heroiques autonomes, ou un desentrelacement, un
decodage REED-Solomon et une correction, ledit systeme integre comprenant
un tampon d'entree (TAMPON ENTREE), une interface avec un bus
microcontroleur (muP IF), un decodeur REED-Solomom (DECODEUR REED-SOLOMON),
une memoire RAM integree (DRAM) a laquelle accede un bus 17 bits,un
bloc de commande de desembrouillage et EDC (DESEMBROUILLAGE et EDC) pour
des modes DVD de fonctionnement d'un bloc de desembrouillage
(DESEMBROUILLAGE CD) pour modes CD de fonctionnements, une interface de
sortie de donnees (INTERFACE SORTIE) et un bloc de commande de
synchronisation (COMMANDE SYNCHRONISATION), permettant le decodage des
donnees d'entree acquises par l'intermediaire dudit tampon d'entree...
Claims:
...eines integrierten Systems (ECC-IC) eines Lesekanals von Daten, die auf
DVD-ROM, DVD-RAM und DVD-R aufgezeichnet sind, zur Durchfuhrung einer
Reed- Solomon-Decodierung, die eine drastische Offline-Korrektur
einschliesst, wobei das...

...Solomon-Decoder (REED-SOLOMON DECODER), ein eingebettetes RAM (DRAM),
auf das durch einen 17-Bit- Bus zugegriffen wird , einen Entwurfelungs-
und EDC-Steuerblock (DESCRAMBLING & EDC) fur DVD -Betriebsarten, eine
Datenausgabeschnittstelle (OUTPUT INTERFACE) und einen Timingsteuerblock
(TIMING CONTROL), dadurch gekennzeichnet, dass die Decodierung der

Eingangsdaten...

...Eingangspuffer (INPUT BUFFER) erfasst werden, mit einer Rate von bis zum vierfachen der Referenzbitrate von DVD -formatierten Daten durchgefuhrt wird , wobei ein Takt zum Zugreifen auf das eingebettete RAM verwendet wird, der eine Frequenz aufweist...

...blocks of an integrated system (ECC-IC) of a read channel of data recorded on DVD -Rom, DVD -Ram and DVD -R for performing Reed-Solomon decoding including off-line heroic correction, said integrated system including an input buffer (INPUT BUFFER), an interface with a microcontroller bus (muP IF), a Reed-Solomon decoder (REED-SOLOMON DECODER), an embedded RAM (DRAM) accessed through a 17-bit bus , a descrambling and EDC control block (DESCRAMBLING & EDC) for DVD modes of operation, a data output interface (OUTPUT INTERFACE) and a timing control block (TIMING CONTROL), characterized in that the decoding of the input data acquired through said input buffer (INPUT BUFFER) is performed at a rate of up to four-times the reference bit rate of DVD formatted data using a clock for accessing said embedded RAM having a frequency half that...

...connexion, le systeme integre comprenant un tampon d'entree (INPUT BUFFER), une interface avec un bus de microcontroleur (muP IF), un decodeur Reed -Solomon (REED- SOLOMON DECODER), une RAM integree (DRAM) a laquelle on accede par un bus a 17 bits, un bloc de commande de desembrouillage et EDC (DESCRAMBLING & EDC) pour des modes de fonctionnement DVD , une interface de sortie de donnees (OUTPUT INTERFACE) et un bloc de commande de synchronisation (TIMING CONTROL), caracterise en ce que le decodage des donnees d'entree acquises par le tampon d'entree (INPUT BUFFER) est realise a une cadence allant jusqu'a quatre fois le debit de bits de reference de donnees formatees DVD en utilisant une horloge ...line heroic correction, the integrated system including an input buffer, an interface with a microcontroller bus , a Reed-Solomon decoder, an embedded RAM accessed through a 17-bit bus , a descrambling and EDC control block for DVD modes of operation, a data output interface and a timing control block, wherein the decoding of input data acquired through the input buffer is performed at a rate of up to four-times a reference bit rate of DVD formatted data using a clock for accessing the embedded RAM having a frequency which is half that of the clock that is used in the Reed-Solomon decoder, while reducing the number of accesses to the embedded RAM needed to perform the decoding, the method comprising the steps of:a) organizing DVD mode input data in two blocks or rows of 182 bytes each;b) storing each block or row in 12 pages of distinct banksBasic Derwent Week: 199952

23/5,K/32   (Item 27 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0007433252 - Drawing available
WPI ACC NO: 1996-041842/ 199605
XRPX Acc No: N1996-035087
Compact disk drive controller - has interface which connects host interface and DSP of IDE to receive digital information from compact disk and transmit digital information to host interface
Patent Assignee: CASE M (CASE-I); OAK TECHNOLOGY INC (OAKT-N); VERINSKY P (VERI-I); ZORAN CORP (ZORA-N)
Inventor: CASE M; VERINKY P; VERINSKY P
Patent Family (14 patents, 5 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 689207	A1	19951227	EP 1995201658	A	19950619	199605	B
US 5581715	A	19961203	US 1994264361	A	19940622	199703	E
US 20020032808	A1	20020314	US 1994264361	A	19940622	200222	E
			US 1996673327	A	19960628		
US 20020116552	A2	20020822	US 1994264361	A	19940622	200258	E
			US 1996673327	A	19960628		
US 20030037230	A1	20030220	US 1994264361	A	19940622	200316	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		

US 6546440	B1	20030408	US 1994264361	A	19940622	200327	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
US 6584527	B2	20030624	US 1994264361	A	19940622	200343	E
			US 1996673327	A	19960628		
US 6721828	B2	20040413	US 1994264361	A	19940622	200425	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
US 20040158658	A1	20040812	US 1994264361	A	19940622	200454	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
US 6968404	B2	20051122	US 1994264361	A	19940622	200577	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
US 20060036787	A1	20060216	US 1994264361	A	19940622	200614	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
			US 2005254610	A	20051019		
US 20060101161	A1	20060511	US 1994264361	A	19940622	200633	E
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			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
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			US 2005269461	A	20051107		
US 7124216	B2	20061017	US 1994264361	A	19940622	200668	E
			US 1996673327	A	19960628		
			US 1999442866	A	19991118		
			US 200282990	A	20020225		
			US 2004773880	A	20040206		
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US 7124217	B2	20061017	US 1994264361	A	19940622	200668	E
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			US 2005269461	A	20051107		

Priority Applications (no., kind, date): US 1994264361 A 19940622; US 1996673327 A 19960628; US 1999442866 A 19991118; US 200282990 A 20020225; US 2004773880 A 20040206; US 2005254610 A 20051019; US 2005269461 A 20051107

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 689207	A1	EN	45	87	
Regional Designated States,Original:					DE FR GB IT
US 5581715	A	EN	47	83	
US 20020032808	A1	EN			Continuation of application US 1994264361
					Continuation of patent US 5581715
US 20020116552	A2	EN			Continuation of application US 1994264361
					Continuation of patent US 5581715
US 20030037230	A1	EN			Continuation of application US 1994264361
					Continuation of application US 1996673327
					Continuation of application US 1999442866
					Continuation of patent US 5581715
US 6546440	B1	EN			Continuation of application US 1994264361
					Continuation of application US

	1996673327			Continuation of patent	US 5581715
US 6584527	B2	EN		Continuation of application	US 1994264361
				Continuation of patent	US 5581715
US 6721828	B2	EN		Continuation of application	US 1994264361
	1996673327			Continuation of application	US
	1999442866			Continuation of application	US
				Continuation of patent	US 5581715
				Continuation of patent	US 6546440
				Continuation of patent	US 6584527
US 20040158658	A1	EN		Continuation of application	US 1994264361
	1996673327			Continuation of application	US
	1999442866			Continuation of application	US
	200282990			Continuation of application	US
				Continuation of patent	US 5581715
				Continuation of patent	US 6546440
				Continuation of patent	US 6584527
				Continuation of patent	US 6721828
US 6968404	B2	EN		Continuation of application	US 1994264361
	1996673327			Continuation of application	US
	1999442866			Continuation of application	US
	200282990			Continuation of application	US
				Continuation of patent	US 5581715
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				Continuation of patent	US 6584527
				Continuation of patent	US 6721828
US 20060036787	A1	EN		Continuation of application	US 1994264361
	1996673327			Continuation of application	US
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	200282990			Continuation of application	US
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				Continuation of patent	US 5581715
				Continuation of patent	US 6546440
				Continuation of patent	US 6584527
				Continuation of patent	US 6721828
				Continuation of patent	US 6968404
US 20060101161	A1	EN		Continuation of application	US 1994264361
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	1999442866			Continuation of application	US
	200282990			Continuation of application	US
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	2005254610			Continuation of application	US
				Continuation of patent	US 5581715
				Continuation of patent	US 6546440
				Continuation of patent	US 6584527
				Continuation of patent	US 6721828
				Continuation of patent	US 6968404
US 7124216	B2	EN		Continuation of application	US 1994264361

		Continuation of application US
1996673327		
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2004773880		
		Continuation of patent US 5581715
		Continuation of patent US 6546440
		Continuation of patent US 6584527
		Continuation of patent US 6721828
		Continuation of patent US 6968404
US 7124217 B2 EN		Continuation of application US
1994264361		
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200282990		
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2005254610		
		Continuation of patent US 5581715
		Continuation of patent US 6546440
		Continuation of patent US 6584527
		Continuation of patent US 6721828
		Continuation of patent US 6968404

Alerting Abstract EP A1
The controller comprises a host interface. The interface connects the host computer via an IDE data **bus** to the compact **disk** drive controller to receive data addresses and commands from the host computer. It also transmits digital information to the host computer.
A path communicates the data addresses and commands from the host interface to the microcontroller of the drive electronics. A DSP (28) interface connects the host interface and the digital signal processor of the drive electronics to receive digital information from the compact disk and transmit digital information to the host interface.
ADVANTAGE - Overcomes problems associated with existing CD drive controllers which prohibits employment of most cost efficient or highest performance combination of devices.

Title Terms/Index Terms/Additional Words: COMPACT; DISC; DRIVE; CONTROL; INTERFACE; CONNECT; HOST; RECEIVE; DIGITAL; INFORMATION; TRANSMIT; DIGITAL; SIGNAL; PROCESSOR; INTEGRATED; DRIVE; ELECTRONICS

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
```
G06F-0013/12   A  I  F  B  20060101
G06F-0003/00   A  I  F  B  20060101
G06F-0003/06   A  I     R  20060101
G11B-0027/10   A  I     R  20060101
G06F-0013/12   C  I  F  B  20060101
G06F-0013/12   C  I  L  B  20060101
G06F-0003/00   C  I  L  B  20060101
G06F-0003/06   C  I     R  20061220
G11B-0027/10   C  I     R  20060101
```
US Classification, Issued: 710005000, 713001000, 710062000, 710062000, 710005000, 395309000, 395185010, 395822000, 395849000, 395872000, 364130000, 364232200, 364236200, 364237900, 364DIG100, 364238300, 364265000, 371030000, 710062000, 710002000, 710129000, 710129000, 710002000, 710029000, 710036000, 710052000, 711118000, 712233000, 712245000, 714048000, 714746000, 714758000, 710062000, 710002000, 710129000, 710062000, 710002000, 710129000

File Segment: EPI;
DWPI Class: T01; T03
Manual Codes (EPI/S-X): T01-C01; T03-B08; T03-N01; T03-P01A

Alerting Abstract ...controller comprises a host interface. The interface connects the host computer via an IDE data **bus** to the compact **disk** drive controller to receive data addresses and commands from the host computer. It also transmits...

Original Publication Data by Authority

Original Abstracts:
A compact **disk** drive controller to **control** the access of information from an optical compact **disk** (CD) **digital** data **storage device** by a host computer using an integrated drive electronics (IDE) data **bus** or an industry **standard** architecture (ISA) data **bus** is disclosed. A **digital** signal processor (DSP) interface to the drive electronics of the CD drive, a dynamic **random** access memory (DRAM) controller, an error correction code (ECC) data corrector, an error detection and...

...A compact **disk** drive controller to control the access of information **from** an optical compact **disk** (CD) digital data storage device by a host **computer** **using** an integrated drive electronics (IDE) data **bus** or an industry standard architecture (ISA) data **bus** **is** disclosed. A digital signal processor (DSP) interface **to** the drive electronics of the CD drive, a dynamic random access memory (DRAM) controller, **an** error correction code (ECC) data corrector, an error detection and correction (EDC) device employing cyclical...
...A compact **disk** drive controller to control the access of information from an optical compact **disk** (CD) digital data storage device by a host computer using an integrated drive **electronics** (IDE) data **bus** or an industry standard architecture (ISA) data **bus** is disclosed. A digital signal **processor** (DSP) interface to the drive electronics of **the** CD drive, a dynamic random access memory (DRAM) controller, an error correction code (ECC) **data** corrector, an error detection and correction (EDC) device employing cyclical redundancy checking techniques (EDC/CRC...

...A compact **disk** drive controller to control the access of information from an optical compact **disk** (CD) digital data storage device **by a** host computer using an integrated drive electronics (IDE) data **bus** or **an** **industry** standard architecture (ISA) data **bus** is disclosed. A digital signal processor (DSP) interface to the **drive** electronics of the CD drive, a dynamic **random** access memory (DRAM) controller, an error correction code (ECC) data corrector, an error detection **and** correction (EDC) device employing cyclical redundancy checking techniques (EDC/CRC), and a host computer interface...

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and a host computer **interface** are described....digital data storage
device by a host computer using an integrated drive electronics (IDE) data
bus or an industry standard architecture (ISA) data **bus** **is** disclosed.
A digital signal processor (DSP) interface to the drive electronics of **the**
CD drive, a dynamic random access memory (DRAM) controller, an error
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and a host computer interface are described.

...

...A compact **disk** drive controller to control the access of information
from an optical compact **disk** (**CD**) digital data storage device by a host
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signal **processor** (DSP) interface to the drive electronics of the **CD**
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drive electronics of the **CD** **drive** , a dynamic random access memory
(DRAM) controller, an error correction code (ECC) **data** **corrector** , an
error detection and correction (EDC) device employing cyclical redundancy
checking techniques (EDC/CRC), and **a** host computer interface are
described.
Claims:
...random access memory and a system controller, wherein said host computer
communicates with said compact **disk** drive **controller** via an IDE data
bus and **receives** digital information from the compact **disk** via **said**
IDE data **bus** . said **compact** **disk** drive **controller** comprising:</br>
a host interface connecting said host computer via said IDE data **bus** with
said compact **disk** drive controller, to **receive** data addresses and
commands from said host computer and to transmit digital information to
said...

...electronics including a digital signal processor, a microcontroller, a
random access memory and a system **controller** , wherein said host computer
communicates with said compact **disk** drive controller via an IDE data **bus**
 and receives digital information from the compact **disk** via said IDE
data **bus** , said compact **disk** drive controller **comprising** :a host
interface connecting said host computer **via** said IDE data **bus** **with**
said compact **disk** drive controller, to receive data addresses and
commands from said host computer and to transmit digital **information** to
said host **computer** ,a path for communicating data addresses and commands
from said host interface to the microcontroller...
...said digital signal processor of said drive electronics to receive
digital information from said compact **disk** and to transmit said digital
information to said host interface...

...carry out initial signal transitions on DASP, PDIAG, and HIRQ lines of
said IDE/ATA **bus** in response to soft reset and execute drive diagnostic
command events, andcircuitry operable to ...said optical drive controller
operable to allow a microcontroller, which controls reading of information
from **optical** **media** , to read from said multi-byte command buffer, to
cause said BSY bit to be altered, to read said DRV bit, and **to** cause

certain transitions of signals on said DASP, PDIAG, and HIRQ lines of said IDE/ATA **bus** .

...

...What is claimed is:1. An...

...said host interface operable to be directly connected to a host computer via an IDE/ **ATA** **bus** to communicate addresses, commands, and data through ATA command block register addresses, said host interface...

...bus.
...

...What is claimed is:A compact **disk** drive controller to control the communication of data between a compact **disk** in a compact **disk** drive and a host computer via an IDE/ATA data **bus** , said data **bus** for receiving and transmitting data between said controller and said **host** computer, said **disk** drive having drive electronics that include a digital signal **processor** and a microcontroller, said controller comprising:</br>a digital signal processor interface for receiving data from said digital signal processor, said digital signal processor interface descrambling and assembling **data** received from said digital signal processor;</br>memory means for temporarily storing data, said memory means temporarily storing said assembled data;</br>data error detection and correction means for correcting said assembled **data** , said detection and correction means including error correction circuitry for performing error correction on said assembled data and a cyclic redundancy **checker** for detecting **errors** in said **assembled** **data** **after** **correction** of said **data** by said correction circuitry for **providing** corrected **data** ; and</br>host interface means for connecting said **host** computer to said controller, said interface means adapted to receive data **addresses** and commands from said host computer and transmit **corrected** data to said **host** computer **to** insure an uninterrupted flow of data from said **controller** to said host computer...

...carry out initial signal transitions on DASP, PDIAG, and HIRQ lines of said IDE/ATA **bus** in response to soft reset and execute drive diagnostic command events, andcircuitry operable to...

...said optical drive controller operable to allow a microcontroller, which controls reading of information from **optical** **media** , to read from said multi-byte command buffer, to cause said BSY bit to be...

...certain transitions of signals on said DASP, PDIAG, and HIRQ lines of said IDE/ATA **bus** .

...

...medium in an optical drive device and a host computer via an IDE/ATA data **bus,** said data **bus** for receiving and transmitting data between said controller and said host computer, said **optical** **drive** device having drive electronics, said optical drive controller comprising:a storage medium interface for receiving...

...correction circuitry, said detection and correction circuitry including:error correction circuitry for performing error correction **on** data received from said interface and generating corrected data, anderror detection circuitry for detecting...
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?